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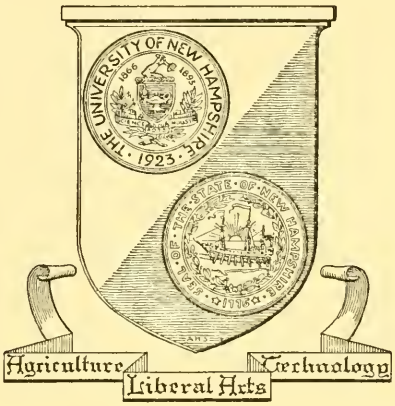

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THE UNIVERSITY OF NEW HAMPSHIRE
AGRICULTURAL EXPERIMENT STATION

Department of Agricultural Chemistry

Inspection of Commercial Feeding Stuffs

1937

Made for the
State Department of Agriculture

By T. O. Smith and H. A. Davis

The University of New Hampshire
Durham, N. H.

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INSPECTION OF COMMERCIAL FEEDING STUFFS

Made for the

STATE DEPARTMENT OF AGRICULTURE

The inspection of commercial feeding stuffs reported in this bulletin was made under the direction of Honorable Andrew L. Felker, Commissioner of Agriculture. Mr. E. D. Sanborn, State Inspector, collected samples of 400 brands of feeding stuffs which were offered for sale in the State during the year ending June, 1937. The 400 samples represent brands of 114 manufacturers.

THE LAW

The New Hampshire law, entitled an Act to Regulate the Sale of Concentrated Commercial Feeding Stuffs, requires every manufacturer or dealer who shall sell or offer for sale any concentrated commercial feeding stuff to furnish with each package a clearly printed statement certifying the net weight of the feed contained in the package, the brand name or trademark under which the feed is sold, the name and address of the manufacturer, the ingredients of which the feed is composed, and a chemical analysis stating the minimum percentage only of protein, fat and carbohydrates, and the maximum percentage only of crude fiber.

Manufacturers and jobbers who ship concentrated commercial feeding stuffs into the State are required to register each brand and to pay a license fee. Under the provisions of the law if the shipper fails to register, the dealer is responsible. Feeds manufactured in other states frequently pass through several middlemen before they reach the local distributor. Dealers who purchase feed for resale must assure themselves the brands they purchase are properly registered or assume that responsibility.

In order to secure greater uniformity in the labelling of feeds and in the statement of ingredients, the Association of American Feed Control Officials has adopted definitions and standards. The Association has also approved twenty-one General Regulations which "should be adopted by state officials as far as the statutes will permit." There are no conflicts in these regulations with the New Hampshire

Feeding Stuffs Law. All manufacturers and dealers are therefore expected to conform to the regulations of the Association in all matters not specifically mentioned in the law.

The chief purpose of the Feeding Stuffs Law is to protect the consumer against the inferior products which would doubtless soon appear on the market if the trade were not under state control. The law is primarily a correct-labelling act. It must not be assumed by the purchaser of feeding stuffs that every brand which meets the manufacturer's guarantee is a high-grade feed. The Feeding Stuffs Law does not prevent the sale of a low-grade feed if it is properly licensed and tagged and is offered for sale in compliance with the law. It would not be in the public interest to legislate against the sale of the lower-grade by-products. They can be fed profitably if bought at a price adjusted to their feeding value. The law does prevent an inferior feed being offered for sale as a high-grade product.

In purchasing feeds both the dealer and the consumer should specify: The feed delivered on this order must comply with the New Hampshire Feeding Stuffs Law. Do not accept delivery in untagged or unlabelled bags. The dealer who offers for sale a feeding stuff which has not been registered or which is not guaranteed in compliance with the law is probably indifferent to his customer's interests in other respects. He does not merit either the confidence or patronage of the consumer.

The purchaser's co-operation in refusing to buy a feed which does not conform to the law in every respect will not only help in the enforcement of the law but will at the same time afford himself the protection of the law. If the buyer fails to assure himself the legal requirements have been met, he accepts the feeding stuff at his own risk. The State official charged with the enforcement of the feeding stuffs law is the Commissioner of Agriculture. All inquiries concerning the law and all matters relative to the registration of brands should be addressed to his office in Concord.

CLASSIFICATION

In classifying the feeding stuffs here reported, the class name under which they were offered to the consumer has been used. The classes are arranged alphabetically. Table I shows the number of brands in each class, the page on which the analysis may be found, the average price per 100 pounds, the average per cent of protein, the number of pounds of protein per $1.00, the number deficient by one-half per cent or more of protein, the average per cent fat, the number of pounds of fat per $1.00, and the number deficient by one-fourth per cent or more of fat.

The columns pounds of protein per $1.00 and pounds of fat per $1.00 are included for the convenience of consumers interested in the comparative cost of protein and fat in the different concentrates. They are not corrected for the varying amounts of the other constituents.

TABLE I

Class	Analyses on page	Number in class	Average price per 100 pounds	Average per cent protein	Pounds of protein per $1.00	Number deficient 1/2 per cent protein	Average per cent fat	Pounds of fat per $1.00	Number deficient 1/4 per cent fat
Alfalfa Leaf Meal	26	2	2.35	19.60	8.3	1	2.32	1.0	1
Alfalfa Meal	26	3	2.05	13.62	6.3	0	1.40	0.7	0
Calf Meal	26	4	4.26	19.22	4.5	1	4.54	1.1	0
36% Cottonseed Meal	27	1	2.30	35.11	15.3	1	5.37	2.3	0
41% Cottonseed Meal	27	5	2.45	40.75	16.6	2	6.11	2.5	0
Dairy Feed	28	118	2.34	21.98	9.4	4	4.35	1.9	11
Distillers' Corn Dried Grains	54	3	2.20	29.54	13.4	0	7.25	3.3	1
Distillers' Rye Dried Grains	54	1	2.00	17.34	8.7	1	5.05	2.5	0
Dog Feed	55	1	5.75	31.79	5.6	0	5.09	0.9	0
Fish Meal	55	2	3.27	59.38	18.2	0	10.92	3.4	0
Gluten Feed	55	6	2.17	26.96	12.4	0	2.28	1.0	0
Gluten Meal	56	1	2.75	49.91	18.2	0	1.31	0.5	0
Hominy Feed	56	3	2.48	11.14	4.5	1	7.08	2.9	1
Kelp	56	1	4.00	5.47	1.4	0	0.29	0.1	0
Linseed Meal	56	6	2.52	36.01	14.3	2	6.03	2.4	0
Meat Scraps	57	6	3.22	49.24	15.3	2	10.02	3.1	0
Milk, Dried Skimmed	58	2	8.42	35.92	4.3	0	0.85	0.0	0
Oat Hulls	58	1	1.65	8.14	4.9	0	2.23	1.4	0
Oat Meal	59	3	3.05	16.35	5.4	0	4.99	1.6	0
Poultry Feed	59	138	2.97	19.65	6.6	0	5.35	1.8	3
Soybean Oil Meal	95	6	2.58	41.56	16.1	0	5.51	2.1	0
Stock Feed	96	15	2.31	10.42	4.5	0	4.89	2.1	0
Wheat Bran	99	23	2.15	16.58	7.8	0	4.65	2.2	0
Wheat Middlings	102	22	2.18	17.60	8.0	1	4.62	2.1	3
Wheat Mixed Feed	105	15	2.32	17.18	7.4	1	4.43	1.9	2
Wheat Red Dog	107	4	2.38	18.70	7.9	0	4.22	1.8	0
Wheat Shorts	108	8	2.19	18.54	8.5	0	5.31	2.4	2
		400				17			24

NUMBER OF SAMPLES FAILING TO COMPLY WITH THE LAW

One hundred sixty five of the 400 brands analyzed failed to comply with the law in every respect, violating it on 195 counts. Nearly all of these violations, however, are negligible if considered on the basis of the valueoof the feed to the purchaser.

Eight brands were found deficient more than one per cent in the most valuable constituent, protein. These deficiencies were 2.66, 2.34, 2.11, 1.72, 1.27, 1.19, 1.18 and 1.14 per cent. Nine brands were deficient more than one-half per cent but less than one per cent. Eleven brands were deficient less than one-half per cent. The 28 brands found deficient in protein is equivalent to 7.0 per cent of the brands analyzed.

Thirty-six brands or 9.0 per cent were deficient in fat; 12 of these were deficient less than one-fourth per cent. None of the other deficiencies was more than 0.70 per cent except one which was 3.58 per cent.

Forty-four brands contained an excessive amount of crude fiber. Eighty-seven brands were deficient in carbohydrates. In the analysis of a feeding stuff, the percentage of carbohydrates is usually determined indirectly. It is found by subtracting the sum of the percentages of protein, fat, moisture and ash from 100. It is obvious that an excess of protein and fat over the manufacturer's guarantee decreases the percentage of carbohydrates found. Nearly all of this year's carbohydrates deficiencies are due to the protein or fat or both exceeding the guarantee.

In the tabulation of the analytical data, pages 26 to 108 deficiencies of one-half per cent or more of protein and of one-fourth per cent or more of fat are underlined.

In Table II is shown a summary of deficiency figures over a twelve year period.

TABLE II

Year	Per cent Deficient in Protein	Per cent Deficient 1/2 % or more in Protein	Per cent Deficient in Fat	Per cent Deficient 1/4 % or more in Fat	Per cent High in Crude Fiber	Per cent Low in Carbo-hydrates	Per cent with no Carbo-hydrates Guarantee
1926	24.0	16.0	14.0	10.0	6.0	6.5	22.5
1927	24.7	16.4	19.4	13.6	5.9	17.9	14.4
1928	29.8	20.7	13.6	9.3	7.9	10.6	11.7
1929	29.7	20.2	12.1	9.3	6.5	10.3	9.5
1930	17.9	13.1	12.0	8.0	3.9	16.5	16.2
1931	9.0	7.2	15.6	9.7	5.3	15.6	11.2
1932	3.2	1.4	13.1	8.1	2.8	15.5	16.9
1933	4.9	3.6	17.3	9.8	3.6	18.1	5.9
1934	6.4	3.4	11.0	7.1	9.8	16.4	6.6
1935	5.4	3.0	12.7	8.5	9.9	19.8	5.4
1936	8.1	5.2	13.8	8.3	12.2	18.0	0.5
1937	7.0	4.2	9.0	6.0	11.0	21.7	0.0

A copy of the General Regulations and of the Definitions of Feeding Stuffs is reprinted from the Official Publication, Association of American Feed Control Officials, Inc. 1937.

GENERAL REGULATIONS

Regulation 1. Definitions and Standards. The definitions and standards published herein are the definitions and standards of the association, and these should be adopted by state officials so far as the statutes will permit.

Regulation 2. Method of Analysis. The methods of analysis of the Association of Official Agricultural Chemists of North America are adopted as the official methods of analysis of this association.

Regulation 3. Registration of Brands and Guarantees. In submitting guaranties for registration the uniform registration blank (which is usually supplied by each State Control Official) should be used. The guaranty, in all cases, must be an exact copy of the labels on the package.

Regulation 4. Labels required on all packages. Each package of feed must bear a complete label. The label must be printed on one side of a tag attached to the package, or upon one side of the package itself. In either case, the labels must be clear and distinct, in type of sufficient size to be easily read, and must conform in all cases to the uniform label adopted by the association. The names of all ingredients must be printed in type of the same size.

Regulation 5. Label Forms. The information required to be supplied by labels must be given in a definite and uniform manner.

The "sliding scale" method of expressing guaranties, e. g., "Protein ————————15-18%," etc., is prohibited.

NOTE: Uniform types of labels for all classes of feeds have been adopted by the association, but only the one for dairy feeds is included herein.

Type of Label for Mixed Feeds in General

100 LBS. NET

EXCELSIOR DAIRY FEED

Manufactured by (or for)

JOHN DOE FEED MILLS

Doeville, Kansas

GUARANTEED ANALYSIS

Crude Protein, not less than	Per Cent
Crude Fat, not less than	Per Cent
Crude Fibre, not MORE than	Per Cent
Nitrogen-free Extract, not less than	Per Cent

INGREDIENTS: Corn gluten feed, cottonseed meal, wheat bran, wheat shorts, ground corn, alfalfa meal, and oat mill feed, (oat hulls, oat shorts, oat middlings)

Regulation 6. Labels must show net weight. The label on each package of feed must show the net weight of the feed in the package. Understatements of weight are prohibited.

Such statements as 99 pounds net, 100 pounds gross, 100 pounds when packed, etc., are prohibited.

Regulation 7. Guaranties, changes in, after registration. A guaranty and label for a brand of feed having been registered may not be subsequently modified in a way that permits the lowering of the quality of the feed, unless it can be clearly shown that the modification sought to be made is consistent with the interest of the feeder.

It is provided, however, that the ingredients of a feed mixture may be changed after registration on presentation of satisfactory reasons if such a change does not necessitate a lowering of the guaranteed analysis or quality of the feed.

Regulation 8. Registration, general application of. A guaranty registered by a manufacturer or jobber for a brand of feed is held to apply to such a brand, even though manufactured at or shipped from more than one point.

When a guaranty and label have been registered by a manufacturer or by a jobber, no registration shall be required of other sellers of the brand so registered, provided shipments thereof are labeled in accordance with the law and regulations.

Regulation 9. Registration, Cancellation. The following causes are held to be sufficient to justify the cancellation of registrations:

(a) When the brand name of the feed is found to be misleading in any respect.
(b) When found to contain an injurious ingredient.
(c) When packages are incorrectly labeled with regard to ingredients.
(d) When the analyses of samples establish the fact of misbranding or adulteration.
(e) When labels on packages contain any statement, design or device which tends to mislead the purchaser.

Regulation 10. Brand Names, duplication of or infringement on. A brand name is distinctive with reference to the feed to which it applies, and the registration of feeds under the same brand name by two or more manufacturers or shippers shall be discouraged. This regulation applies also to the registration of brand names so similar in character as to be likely to be confused by the purchaser.

If the same brand name, or a closely similar one, is offered by another, the official should acquaint both of such persons or firms with the facts, with the view of avoiding the confusion which follows the duplication of brand names.

Regulation 11. Brand Names. The name of a brand must not tend to mislead the purchaser with respect to any quality of the feed. If the brand name indicates that the feed is made for a specific use, the character of the feed must conform therewith. A mixture labeled "dairy feed," for example, must be adapted for that purpose.

A brand name may not be derived from a single ingredient of a mixture. A distinctive name shall not be one representing any single component of a mixture.

Regulation 12. Ingredients' statement. The following regulations apply to the statement of ingredients on labels and on registration:

(a) Each and every ingredient in the feed mixture must be stated; see paragraph (e) in Regulation 9.
(b) The common English names of ingredients are to be used.

Regulation 13. Inert Mineral Matter and Charcoal in Feeds. In the case of feeds containing inert grit, other added inert mineral matter, or charcoal, the words "with grit," "with charcoal," etc., must occur in the brand name, and in the statement of ingredients the kind and amount of grit or other added mineral matter, charcoal, etc., must be given; provided that not more than a total of five per cent of grit, charcoal, and/or other mineral or inert

ingredients may be present in any feed other than in the so-called mineral feed mixtures.

Inert materials are materials that do not contribute dietary factors.

Regulation 14. Ingredients, improper or incomplete designation of. Each ingredient must be specifically named. Such general statements as "corn products," "wheat products," "grain screenings," "miscellaneous seeds," "mixed shorts," "mixed bran," "wheat mill by-products," "corn mill by-products," etc., may not be used, but each and every ingredient must be designated in such a way that the purchaser may be completely informed by the label of the components of the feed mixture.

The words "bran," "brown shorts," "gray shorts," and "white shorts" refer to wheat bran and wheat shorts. "Rice shorts," "corn shorts," "mixed shorts," and "mill run shorts," etc., are incorrect designations.

Such terms as "mill run bran" and "mill run shorts" cannot be used to refer to a mixture of wheat bran and wheat shorts.

A mixture of wheat bran and corn bran cannot be labeled "bran;" the proper designation is "wheat bran and corn bran." Corn chops containing added bran or other ingredients cannot be sold as corn chops.

Regulation 15. Labels for wheat bran and wheat shorts containing screenings. The admixture of any proportion of wheat screenings requires a declaration to that effect in the principal brand name and in type of same size. For example:

(a) Wheat Bran with Ground Wheat Screenings not exceeding Mill Run, or ( ) per cent.

(b) Wheat Grey Shorts with Ground Wheat Screenings not exceeding Mill Run, or ( ) per cent.

Regulation 16. Labels, declaration regarding screenings. When any proportion whatever of screenings is used in a mixture, the label must state specifically the source and conditions of each and every kind of screenings so used. Indefinite names such as "grain screenings," "miscellaneous seeds," "field seeds," will not be accepted as proper designations.

Screenings must not contain any seed or other product injurious to animals, and, except in poultry feeds, must be ground fine enough in all cases to destroy the viability of the seeds contained therein. Manufacturers are warned that screenings must not contain a sufficient proportion of mustard seed to be injurious or fatal.

Regulation 17. Private tags or printed matter on or with packages. No printed or written matter or design of any kind shall be attached to or appear on or be packed with feed, if such matter contains any statement which is incorrect, or which is at variance in any respect with the information on the principal label.

Regulation 18. Use of preservatives. No added preservative of any kind may be used in the manufacture of a feed until its use, and the condition of its use, shall have been approved by the association.

Regulation 19. Reports of Inspections and of Analyses. When an inspection and an analysis show a shipment to conform to the law, regulations, and to the labels, the manufacturer or guarantor and the dealer or owner shall be supplied, with as little delay as possible, with a copy of the analysis and with a report of the inspection. The analytical report shall show the actual analysis and the guaranteed composition in parallel columns.

Regulation 20. Reports of inspections and analyses when deficiencies or other irregularities occur.

A. If the analysis of an inspector's sample of a shipment shows a de-

ficiency with respect to the amounts of fat and protein, or an excess of fiber as compared with the label and guarantee; if the statement of ingredients is incomplete or inaccurate, or if the shipment is found to be sold or offered for sale in violation of any requirement of law or regulation, the guarantor or person responsible for the sale of the feed and the dealer shall be fully informed regarding the objection found, and shall be given ten days in which to submit a written explanation unless, in the judgment of the enforcing officer, immediate action is necessary.

B. The dealer may be instructed to discontinue the sale of the shipment in question until a decision has been reached with reference to the proper disposition of it under the laws and regulations in force.

C. If the official is convinced, after receiving and considering such an explanation, that any requirement of law or of regulation has been violated, an appropriate report shall then be made to the person or firm from whose stock the sample was drawn, and to the guarantor. This regulation makes no reference to procedures to be followed in feed law enforcement.

Regulation 21. Resampling Shipments. Shipments of feed may be inspected and sampled a second time at the request of the guarantor if, in the discretion of the control official, substantial reason exists therefor.

DEFINITIONS OF FEEDINGSTUFFS

ALFALFA PRODUCTS

1. **Chopped Alfalfa** is the entire alfalfa hay, chopped and not ground finely enough to become a meal. It must not contain an admixture of alfalfa straw or other foreign material. (Adopted prior to 1928). Galley 4.

2. **Alfalfa Meal** is the product obtained from the grinding of the entire alfalfa hay, without the addition of any alfalfa stems, alfalfa straw or foreign material, or the abstraction of leaves. It must be reasonably free from other crop plants and weeds, and must not contain more than 33 per cent of crude fibre. (Adopted 1928).

3. **Alfalfa Leaf Meal** is the ground product consisting chiefly of leafy materials separated from alfalfa hay. It must be reasonably free from other crop plants and weeds and must not contain more than 18 per cent of crude fibre. (Adopted 1928).

4. **Alfalfa Stem Meal** is the ground product remaining after the separation of the leafy material from alfalfa hay or meal. It must be reasonably free from other crop plants and weeds. (Adopted 1928).

ANIMAL PRODUCTS

5. **Blood Meal** is ground, dried blood. (Adopted 1926).

6. **Blood Flour** is dried blood, prepared by special processes and reduced to a fine powder. (Adopted prior to 1928).

7. **Digester Tankage, Meat Meal Tankage or Feeding Tankage** is the residue from animal tissues exclusive of hoof, horn, manure and stomach contents, except in such traces as might occur unavoidably in good factory practice, especially prepared for feeding purposes by tanking under live steam or by dry rendering or a mixture of the products made suitable by drying and grinding. It must not contain more than 4.37 per cent of phosphorus (P). If it bears a name descriptive of its kind, composition or origin, the material must correspond thereto. (Adopted 1928—Amended 1933, 1936).

8. **Digester Tankage with Bone, Meat and Bone Meal Digester Tankage, Meat and Bone Meal Tankage, or Feeding Tankage with Bone** is the residue from animal tissues exclusive of hoof, horn, manure and stomach contents, except in such traces as might occur unavoidably in good factory practice, especially prepared for feeding purposes by tanking under live steam or by dry rendering or a mixture of the products made suitable by drying and grinding, and containing more than 4.37 per cent of phosphorus (P). If it bears a name descriptive of its kind, composition or origin, it must correspond thereto. (Adopted 1928—Amended 1933, 1936).

9. **Meat Scraps** is the ground, dry-rendered residue from animal tissues exclusive of hoof, horn, manure and stomach contents, except in such traces as might occur unavoidably in good factory practice. When this product contains more than 4.37 per cent of phosphorus (P), it shall be designated Meat and Bone Scrap. If it bears a name descriptive of its kind, composition or origin it must correspond thereto. (Adopted 1928—Amended 1936).

10. **Raw Bone Meal** is the dried, ground product suitable for animal feeding, obtained by cooking in water at atmospheric pressure, undecomposed bone, just enough to remove excess fat and meat. It must not contain less than 23 per cent of protein. (Adopted 1929).

11. **Steamed Bone Meal** is the dried, ground product suitable for animal feeding, obtained by cooking bones with steam under pressure. (Adopted 1929).

12. **Special Steamed Bone Meal** is the dried, ground product suitable for animal feeding, obtained by cooking dried bone after the removal of grease and meat fibre with steam under pressure in the process of obtaining gelatine or glue. (Adopted 1929).

APPLE PRODUCTS

13. **Dried Apple Pomace** is the sound, dried residue obtained by the removal of cider from apples. (Adopted 1929).

14. **Dried Apple Pectin Pulp** is the sound, dried residue obtained by the removal of pectin from apple products. (Adopted 1929).

BARLEY PRODUCTS

15. **Barley Hulls** is the product consisting of the outer coverings of the barley. (Adopted prior to 1928).

16. **Barley Feed** is the entire by-product resulting from the manufacture of pearl barley from clean barley. (Adopted prior to 1928).

17. **Barley Mixed Feed** is the entire offal from the milling of barley flour from clean barley and is composed of barley hulls and barley middlings. (Adopted prior to 1928).

18. **Ground Barley** is the entire product obtained by grinding clean sound barley, containing not less than 90 per cent of pure barley and not more than 10 per cent of other grains, weed seeds and other foreign material and not more than 6 per cent of crude fibre; provided that no portion of this stated 10 per cent of other grains, weeds seeds or other foreign material shall be intentionally added. (Adopted prior to 1928).

19. **Mixed Feed Barley** is the entire product obtained by grinding country run barley containing not less than 75 per cent of pure barley and not more than 25 per cent of other grains, weed seeds and other foreign material; provided that no portion of this stated 25 per cent of other grains, weed seeds or foreign material shall be intentionally added. The ingredients must be stated as barley, other grains, weed seeds and foreign material. (Adopted prior to 1928).

BEET PRODUCTS

20. **Dried Beet Pulp** is the dried residue from sugar beets which have been cleaned and freed from crowns, leaves and sand, and from which the sugar has been extracted. (Adopted prior to 1928).

BREWERS' AND DISTILLERS' PRODUCTS

21. **Brewers' Dried Grains** is the dried extracted residue of barley malt and/or other cereal grain or grain products resulting from the manufacture of wort. (Adopted 1936).

22. **Distillers' Corn Dried Grains or Distillers' Rye Dried Grains** is the dried residue obtained in the manufacture of alcohol and distilled liquors. The product must bear the designation indicating the cereal predominating. (Adopted prior to 1928).

23. **Distillers' Corn Solubles** is a by-product from the manufacture of alcohol from corn solids obtained by the evaporation of the mash liquor after the removal of the alcohol and wet grains. (Adopted prior to 1928).

24. **Distillers' Rye Solubles** is a by-product from the manufacture of alcohol from rye solids obtained by the evaporation of mash liquor after the removal of the alcohol and wet grains. (Adopted prior to 1928).

25. **Distillers' Corn and Rye Solubles** is a by-product from the manufacture of alcohol from corn and rye solids obtained by the evaporation of mash liquor after the removal of the alcohol and wet grains. (Adopted prior to 1928).

26. **Malt Sprouts** are the sprouts of the barley grain obtained from malted barley. Sprouts derived from any other malted cereal must be designated by by the name of that cereal. (Adopted prior to 1928).

27. **Yeast Dried Grains or Vinegar Dried Grains** is the properly dried residue from the mixture of cereals, malt and malt sprouts (sometimes cottonseed meal) obtained in the manufacture of yeast or vinegar, and consists of corn or corn and rye from which most of the starch has been extracted, together with malt added during the manufacturing process to change the starch to sugars, and malt sprouts (sometimes cottonseed meal) added during the manufacturing process to aid in filtering the residue from the wort and to serve as a source of food supply for the yeast. (Adopted prior to 1928).

BUCKWHEAT PRODUCTS

28. **Buckwheat Shorts or Buckwheat Middlings** are the portions of the buckwheat grain immediately inside the hull secured after separation from the flour. (Adopted prior to 1928).

CHOP

29. **Chop** is a ground or chopped feed composed of one or more different cereals or by-products thereof. If it bears a name descriptive of the kind of cereals, it must be made exclusively of the entire grains of those cereals. (Adopted prior to 1928).

COCOANUT PRODUCTS

30. .....**Per Cent Protein Cocoanut Oil Meal or** .....**Per cent Protein Copra Oil Meal** is the ground residue from the extraction of part of the oil from the dried meat of the cocoanut. (Adopted prior to 1928).

CORN PRODUCTS

31. **Corn Meal** is finely ground, unbolted corn. (Adopted prior to 1928).

32. **Corn Bran** is the outer coating of the corn kernel, with little or none of the starchy part or germ. (Adopted 1931).

33. **Corn Feed Meal** is the fine siftings obtained in the manufacture of screened corn chop, screened ground corn or screened cracked corn, with or without its aspiration products added. (Adopted 1931).

34. **Corn Chop, Ground Corn or Cracked Corn** is the entire product made by grinding, cutting or chopping the grains of sound Indian corn, and may be fine, medium or coarse, and must not contain more than 4 per cent of foreign material. (Adopted 1931).

35. **Screened Corn Chop, Screened Ground Corn, or Screened Cracked Corn** is the coarse portion of corn chop, ground corn or cracked corn from which most of the fine particles have been removed, and must not contain more than 4 per cent of foreign material. (Adopted 1931).

36. **Corn Grits or Hominy Grits** is the product consisting of the fine or medium sized, hard flinty portions of sound Indian corn containing little or none of the bran or germ. (Adopted 1931).

37. **Ear Corn Chops** is corn and cob chopped, without the husk, with no greater proportion of cob than occurs in the ear corn in its natural state. (Adopted prior to 1928).

38. **Corn Gluten Feed** is that part of commercial shelled corn that remains after the extraction of the larger part of the starch and germ by the processes employed in the wet milling manufacture of corn starch or syrup. It may or may not contain one or more of the following: corn solubles, corn oil meal. (Adopted 1936).

39. **Corn Gluten Meal** is that part of commercial shelled corn that remains after the extraction of the larger part of the starch and germ, and the separation of the bran by the process employed in the wet milling manufacture of corn starch or syrup. It may or may not contain one or more of the following: corn solubles, corn oil meal. (Adopted 1936).

40. **Maltose Process Corn Gluten Feed** is the dried residue from degermed corn, after removal of the starch in the manufacture of malt syrup. (Adopted prior to 1928).

41. **Hominy Feed** is a mixture of corn bran, corn germ and a part of the starchy portion of either white or yellow corn kernels or mixture thereof as produced in the manufacture of pearl hominy, hominy grits or table meal, and shall contain not less than 5 per cent of crude fat. If prefixed with the words "white" or "yellow," the product must correspond thereto. (Adopted 1935).

42. **Corn Oil Cake** consists of the corn germ from which part of the oil has been pressed and is the product obtained in the wet milling process of manufacture of corn starch, corn syrup, and other corn products. (Adopted prior to 1928).

43. **Corn Oil Meal** is ground corn oil cake. (Adopted prior to 1928).

44. **Corn Germ Cake** consists of corn germ with other parts of the corn kernel from which part of the oil has been pressed, and is the product obtained in the dry milling process of manufacture of corn meal, corn grits, hominy feed, and other corn products. (Adopted prior to 1928).

45. **Corn Germ Meal** is ground corn germ cake. (Adopted prior to 1928).

46. **Corn Screenings** is the product consisting of the small light grains of corn, parts of grains of corn and/or other cereals, and other materials having feeding value, obtained by screening shelled corn, excluding sand, dirt and other similar inert materials. (Adopted 1931).

COTTONSEED PRODUCTS

47. **Cottonseed Meal** is a product of the cottonseed only, composed principally of the kernel with such portion of the hull as is necessary in the manufacture of oil; provided that nothing shall be recognized as cottonseed meal that does not conform to the foregoing definition and that does not contain at least 36 per cent of protein. Cottonseed meal shall be graded and classed as follows: (Adopted prior to 1928).

48. .....**Per Cent Protein Cottonseed Meal, Prime Quality.** Cottonseed meal, prime quality, must be finely ground, not necessarily bolted, of sweet odor, reasonably bright in color, yellowish, not brown or reddish, free from excessive lint, and shall contain not less than 36 per cent of protein. It must be designated and sold according to its protein content. Cottonseed meal with 36 per cent of protein must be termed "36 per cent Protein Cottonseed Meal, Prime Quality," and higher grades similarly designated (as "43 per cent Protein Cottonseed Meal, Prime Quality"), etc. (Adopted prior to 1928).

49. .....**Per Cent Protein Cottonseed Meal, Off Quality.** Cottonseed meal not fulfilling the above requirement as to color, odor and texture must be graded "36 per cent Protein Cottonseed Meal, Off Quality," and higher grades similarly designated. (Adopted prior to 1928).

50. Cottonseed Feed is a mixture of cottonseed meal and cottonseed hulls, containing less than 36 per cent of protein. (Adopted prior to 1928).

51. .....**Per Cent Protein Whole Pressed Cottonseed, Prime Quality** is the product resulting from subjecting the whole, sound, mature, clean undecorticated cottonseed to pressure for the extraction of oil, and includes the entire cottonseed less the oil extracted and the lint removed. It must be designated and sold according to its protein content. (Adopted 1932).

52. .....**Per Cent Protein Ground Whole Pressed Cottonseed Prime Quality** is whole pressed cottonseed, ground. It must be designated and sold according to its protein content. (Adopted 1932).

GARBAGE

53. Processed Garbage is composed of dried animal and vegetable waste from garbage collected sufficiently often that harmful decomposition has not set in, and separated from material such as crockery and glass. Its odor must not be suggestive of the presence of decomposition and it must contain less than one per cent of glass. None of it shall contain knife-like or needle-like particles and the maximum percentage of glass should be stated on the label when present in excess of one-fifth of one per cent. (Adopted prior to 1928).

IVORY NUT PRODUCTS

54. Ivory Nut Meal is the ground waste material resulting from the manufacture of buttons and similar articles from the vegetable ivory nut. (Adopted prior to 1928).

LINSEED AND FLAX PRODUCTS

55. .....**Per Cent Protein Linseed Cake or Linseed Meal** is the product obtained in the removal of the oil from flaxseed; provided that the final product contains less than 6 per cent of weed seeds and other foreign materials; and provided, further, that no portion of the stated 6 per cent of weed seeds and other foreign materials shall be deliberately added. It shall not contain more than 0.5 per cent of acid insoluble ash. (Adopted 1933).

56. .....**Per Cent Protein Old Process Oil Meal or** .....**Per Cent Protein Old Process Linseed Meal** is oil meal as defined below, produced by crushing, cooking and hydraulic pressure. (Adopted prior to 1928).

57. .....**Per Cent Protein New Process Oil Meal or** .....**Per Cent Protein New Process Linseed Meal** is oil meal as defined below produced by crushing, heating and the use of solvents. (Adopted prior to 1928).

58. **Flax Plant By-Products** is that portion of the flax plant remaining after the separation of the seed, the bast fibre and a portion of the shives, and consists of flax shives, flax pods, broken and immature flax seeds, and the cortical tissues of the stem. (Adopted prior to 1928).

59. **Ground Flaxseed or Flaxseed Meal** is the product obtained by grinding flaxseed which has been screened and cleaned of weed seeds and other foreign materials by the most improved commercial process; the final product must contain less than 4 per cent of weed seeds and other foreign materials, and no portion of the stated 4 per cent of weed seeds and other foreign materials shall be intentionally added. (Adopted prior to 1928.)

60. **Unscreened Flaxseed Oil Feed Cake** is the product obtained by extraction of part of the oil from unscreened flaxseed by crushing, cooking and hydraulic pressure, or by crushing, heating and the use of solvents. The ingredients must be stated as "partially extracted flaxseed and foreign seeds (wheat, wild buckwheat, pigeon grass, wild mustard, etc.)". (Adopted prior to 1928).

61. **Ground Unscreened Flaxseed Oil Feed** is the ground unscreened flaxseed oil feed cake. (Adopted prior to 1928).

62. **Screenings Oil Feed** is the ground product obtained after extraction of part of the oil by crushing, cooking and hydraulic pressure, or by crushing, heating and the use of solvents from the smaller imperfect flaxseed, weed seeds and other foreign materials having feeding value, separated in cleaning flaxseed. The name of the grain from which the screenings are separated must be prefixed to "screenings oil feed." (Adopted prior to 1928).

63. .....**Per Cent Protein Oil Cake** is the product obtained after the extraction of part of the oil by crushing, cooking, and hydraulic pressure, or by crushing, heating and the use of solvents, from flaxseed which have been screened and cleaned of weed seeds and other foreign materials by the most improved commercial process. When used alone the term "Oil Cake" shall be understood to designate linseed cake as defined. When used to cover any other product the name of the seed from which it is obtained must be prefixed to the words "Oil Cake." (Adopted prior to 1928).

64. .....**Per Cent Protein Oil Meal** or .....**Per Cent Protein Ground Oil Cake** is oil cake ground to a meal. (Adopted prior to 1928).

MARINE PRODUCTS

65. **Fish Meal** is clean, dried, ground tissues of undecomposed whole fish and/or fish cuttings with or without the extraction of part of the oil, and contains not more than 3 per cent of salt (NaCl). If it contains more than 3 per cent of salt (NaCl) the amount of salt must constitute a part of the brand name, provided that in no case shall the salt content of this product exceed 7 per cent. (Adopted 1933).

66. **Fish Residue Meal** is the clean, dried, undecomposed residue from the manufacture of glue from non-oily fish, and contains not more than 3 per cent of salt (NaCl). If it contains more than 3 per cent of salt (NaCl) the amount of salt must constitute a part of the brand name, provided that in no case shall the salt content of this product exceed 7 per cent. (Adopted 1933).

67. **Crab Meal** is prepared from the undecomposed dried waste of the crab industry and contains the shell, viscera and part or all of the flesh. It contains not less than 25 per cent of protein and not more than 3 per cent of salt (NaCl). If it contains more than 3 per cent of salt (NaCl) the amount of

salt must constitute a part of the brand name, provided that in no case shall the salt content of this product exceed 7 per cent. (Adopted 1933).

68. **Shrimp Meal** is prepared from the undecomposed dried waste of the shrimp industry and contains the head, hull and/or the whole shrimp and not more than 3 per cent of salt (NaCl). If it contains more than 3 per cent of salt (NaCl) the amount of salt must constitute a part of the brand name, provided that in no case shall the salt content of this product exceed 7 per cent. (Adopted 1933).

69. **Whale Meal** is prepared from the clean, dried undecomposed flesh of the whale, after part of the oil has been extracted. It contains not more than 3 per cent of salt (NaCl). If it contains more than 3 per cent of salt (NaCl) the amount of salt must constitute a part of the brand name, provided that in no case shall the salt content of this product exceed 7 per cent. (Adopted 1933).

70. **Cod Liver Oil** is the product obtained by extraction of part of the oil from cod livers. (Adopted 1932).

71. **Sardine Oil or Pilchard Oil** is the product obtained by extraction of part of the oil from the whole Pacific sardine or pilchard or from cannery refuse of this species of fish. (Adopted 1932).

72. **Salmon Oil** is the product obtained by extraction of part of the oil from the cannery refuse of salmon. (Adopted 1932).

73. **Tuna Oil** is the product obtained by extraction of part of the oil from the cannery refuse of tuna. (Adopted 1932).

74. **Menhaden Oil** is the product obtained by extraction of part of the oil from whole menhaden. (Adopted 1932).

75. **Herring Oil** is the product obtained by extraction of part of the oil from the whole herring or part of the herring. (Adopted 1933).

76. **Salmon Liver Oil** is the product obtained by extraction of part of the oil from salmon livers. (Adopted 1933).

77. **Stearine** is the solid material obtained by filtration from an animal or vegetable oil after chilling or freezing in the process of refining. When this product is sold as a feed, the term shall be prefixed by the name of the oil from which it is obtained. (Adopted 1934).

MILK PRODUCTS

78. **Dried Buttermilk** is the product resulting from the removal of water from clean, sound buttermilk derived from natural cream to which no foreign substances have been added, excepting such as are necessary and permitted in the manufacture of butter. It contains not more than 8 per cent of moisture, not more than 13 per cent of mineral matter (ash), and not less than 5 per cent of butterfat, as determined by the Roese-Gottlieb method. (Adopted 1932).

79. **Evaporated Buttermilk, Concentrated Buttermilk** or **Condensed Buttermilk** is the product resulting from the removal of a considerable portion of water from clean, sound buttermilk derived from natural cream to which no foreign substances have been added excepting such as are permitted and necessary in the manufacture of butter. It contains not less than 27 per cent of total solids, not less than 2 per cent of butterfat, and not more than .14 per cent of ash for each per cent of solids. This definition does not prohibit the use of a distinctive trade name, provided it is followed by one of the names given. (Adopted prior to 1928).

80. **Dried Skimmed Milk** is the product resulting from the removal of water from clean, sound skimmed milk. It contains not more than 8 per cent of moisture. (Adopted 1930).

81. **Dried Soured Skimmed Milk** is the product resulting from the removal of water from clean, sound skimmed milk which has been soured by a suitable culture of lactic bacteria. It contains not more than 8 per cent of moisture. (Adopted 1932).

82. **Evaporated Soured Skimmed Milk, Concentrated Soured Skimmed Milk** or **Condensed Soured Skimmed Milk** is the product resulting from the removal of a considerable portion of water from clean, sound skimmed milk which has been soured by a suitable culture of lactic bacteria. It contains not less than 27 per cent of total solids. (Adopted 1932.)

83. **Condensed Skimmed Milk** is the product resulting from the removal of a considerable portion of water from clean, sound skimmed milk. It contains not less than 27 per cent of total solids. (Adopted 1930).

84. **Dried Whey** is the by-product from the manufacture of cheese and/or casein. This product shall contain at least 65 per cent of lactose (milk sugar). (Adopted 1934).

85. **Cheese Rind** is cooked, partially defatted cheese rind. (Adopted 1935).

MINERAL FEEDS

86. Mixed feeds containing both feed and more than 5 per cent of mineral ingredients require, in addition to the usual declaration of the chemical feed analysis, a declaration of each ingredient contained therein and the minimum percentages of calcium (Ca), phosphorus (P), iodine (I), and the maximum percentage of salt (NaCl) if same be present. If minerals predominate in the mixture, the usual declaration of the chemical feed analysis, with the exception of protein, may be omitted.

In mineral feeds for which no nutritional properties other than those of a mineral nature are claimed, the usual chemical guarantees need not be declared. A declaration should be made of each ingredient contained therein and the minimum percentage of calcium (Ca), phosphorus (P), iodine (I), and the maximum percentage of salt (NaCl) if same be present.

The mineral ingredients should be stated in the common English terms, if any such terms exist.

It being impossible to classify separately the drug ingredients and the mineral ingredients, be it resolved:

(a) That all mixtures containing mineral ingredients generally regarded as dietary factors essential for the normal nutrition of animals and which are sold or represented for the primary purpose of supplying these minerals as additions to rations in which these same mineral factors may be deficient, be classified as mineral feeds.

(b) That all other preparations which are sold or represented primarily for the cure, mitigation or prevention of disease be classified by this Association as drugs, medicines or specifics. (Adopted 1935).

OAT PRODUCTS

87. **Oat Hulls** is the product consisting of the outer covering of the oat. (Adopted prior to 1928).

88. **Oat Middlings** is the product consisting of the floury portions of the oat groat obtained in the milling of rolled oats. (Adopted prior to 1928).

89. Oat Shorts is the product consisting of the covering of the oat grain lying immediately inside the hull, being a fuzzy material carrying with it considerable portions of the fine floury part of the groat obtained in the milling of rolled oats. (Adopted prior to 1928).

90. Oat Chop, Ground Oats, Pulverized Oats, Crushed Oats, or Crimped Oats consists of the entire product made by chopping, cutting, grinding, crushing, or crimping whole oats. (Adopted 1931).

91. Oat Groats are the kernels produced from cleaned and dried oats in the process of manufacturing oat meal. (Adopted 1931).

92. Hulled Oats, or Undried Oat Groats are the kernels produced from the undried grain in the process of hulling oats. (Adopted 1931).

93. Oat Meal, or Ground Oat Groats is the product produced by cutting, cracking or grinding oat groats. (Adopted 1931).

94. Rolled Oat Groats or Rolled Oats is the product obtained in the process of rolling oat groats. (Adopted 1931).

95. Clipped Oat By-Products is the by-product obtained in the manufacture of clipped oats. It may contain the light chaffy material broken from the end of the hulls, empty hulls, light immature oats and dust. It must not contain an excessive amount of oat hulls. (Adopted prior to 1928).

96. Oat Mill Feed (Oat Hulls, Oat Shorts and Oat Middlings) is the entire by-product produced in the manufacture of oat groats and consists of oat hulls, oat shorts and oat middlings. If used in a mixed feed, it shall be called Oat Mill Feed (Oat Hulls, Oat Shorts and Oat Middlings). (Adopted 1932).

PALM PRODUCTS

97. Palm Kernel Oil Meal is the ground residue from the extraction of part of the oil by pressure or solvents from the kernel of the fruit of Elaeis guineensis or Elaeis molanococco. (Adopted prior to 1928).

PEANUT PRODUCTS

98. .....Per Cent Protein Peanut Oil Cake is the residue after the extraction of part of the oil by pressure or solvents from peanut kernels. (Adopted prior to 1928).

99. .....Per Cent Protein Peanut Oil Meal is ground peanut oil cake. (Adopted prior to 1928).

100. Unhulled Peanut Oil Feed is the ground residue obtained after extraction of part of the oil from whole peanuts, and the ingredients must be designated as **Peanut Meal and Hulls.** (Adopted prior to 1928).

RICE PRODUCTS

101. Rice Bran is the pericarp or bran layer of the rice, with only such quantity of hull fragments as is unavoidable in the regular milling of rice. (Adopted prior to 1928).

102. Rice Hulls is the product consisting of the outer coverings of the rice. (Adopted prior to 1928).

103. Rice Polish is the finely powdered material obtained in polishing the kernel. (Adopted prior to 1928).

104. **Rice Meal** is ground brown rice or ground rice after the hull has been removed. (Adopted prior to 1928).

105. **Ground Rough Rice** is ground rice from which the hull has not been removed or ground paddy rice. (Adopted prior to1928).

106. **Rice Stone Bran** is the siftings from the materials secured in removing hulls from rice and contains rice germs, broken rice and some rice hulls. (Adopted prior to 1928).

107. **Rice Huller Bran** is a product secured by the huller and cones from brown rice and consist mostly of the bran and germs. (Adopted prior to 1928).

RYE PRODUCTS

108. **Rye Bran** is the coarse outer covering of the rye kernel as separated from the cleaned and scoured rye. (Adopted prior to 1928).

109. **Rye Feed** is a by-product obtained in the usual process of the milling of rye flour from cleaned and scoured rye grain, consisting principally of the mill-run of the outer covering of the rye grain and the germ with small quantities of flour and aleurone. (Adopted prior to 1928).

110. **Rye Red Dog** is a by-product obtained in the usual process of the milling of rye flour, consisting principally of aleurone with small quantities of flour and fine bran particles and must not contain more than 3.5 per cent of crude fibre. (Adopted prior to 1928).

111. **Rye Low-Grade Feed Flour** consists principally of dark rye flour and small quantities of aleurone and fine bran particles and must not contain more than 1.5 per cent of crude fibre. (Adopted prior to 1928).

112. **Rye Middlings** consists of rye feed and rye red dog combined in the proportions obtained in the usual process of milling rye flour. (Adopted prior to 1928).

113. **Rye Flour Middlings** consist of rye feed, rye red dog and pure dark rye flour combined in the proportions obtained in the milling of rye flour and must not contain more than 5 per cent of crude fibre. (Adopted prior to 1928).

SCREENINGS

114. **Screenings** consist of a mixture of mill or elevator run materials or a combination of varying amounts of materials obtained in the process of cleaning grain and/or seed, such as inferior, light or broken grain or seed, weed seeds, hulls, chaff, joints, straw, elevator dust, floor sweepings. They must be relatively free of unpalatable or injurious weed seeds, sand and dirt. They must not contain more than 14 per cent of fibre or more than 6.50 per cent of ash. If they bear a name descriptive of their kind or origin, they must correspond thereto. (Adopted 1935).

115. **Screenings—Grain** consist of inferior, light or broken grain and/or seed obtained in the process of cleaning grain or seed or recleaning screenings. They must be relatively free of weed seeds, chaff, straw, hulls, joints, sand and dirt, and other foreign materials. If they bear a name descriptive of their kind or origin, they must correspond thereto. (Adopted 1935).

116. **Screenings Waste or Screenings Refuse** is a mixture of materials of little or no feeding value, or injurious as a feed, obtained in the process of cleaning grain and/or seed, or recleaning screenings, such as weed seeds which may be unpalatable or injurious, chaff, hulls, straw, sticks, joints, elevator dust, floor sweepings, sand and dirt. (Adopted 1935).

117. **Scourings** consist of such portions of the cuticle, brush, white caps, dust, smut and other materials as are separated from the grain in the usual commercial process of scouring. (Adopted prior to 1928).

(NOTE)—If to any of the wheat or rye by-product feeds there should be added screenings or scourings—as above defined, either ground or unground, bolted or unbolted, such brand shall be so registered, labeled and sold as clearly to indicate this fact. The word "Screenings," or "Scourings," as the case may be, shall appear as part of the name or brand and shall be printed in the same size and face of type as the remainder of the brand name. When the word "Screenings" appears it is not necessary to show also on the labeling the word "Scourings." (Adopted prior to 1928).

SORGHUM PRODUCTS

118. **Head Chops** is the product consisting of the entire heads of the grain sorghums chopped, and should bear the name of the sorghum from which it is made. This includes, among others, kaffir head chops, milo head chops, feterita head chops, and sorghum head chops. (Adopted prior to 1928).

119. **Head Stems** is the product consisting of the stems from the heads of the grain sorghums after the grain has been removed, and should bear the name of the sorghum from which it is made. (Adopted prior to 1928).

SOYBEAN PRODUCTS

120. **Ground Soybeans** is the product obtained by grinding whole soybeans without cooking or removing any of the oil. (Adopted 1933).

121. .....**Per Cent Protein Soybean Oil Cake or Soybean Oil Chips** is the product obtained by crushing, cooking and removing part of the oil from soybeans. (Adopted 1933).

122. .....**Per Cent Protein Soybean Oil Meal** is ground soybean oil cake or ground soybean oil chips. (Adopted 1933).

VELVET BEAN PRODUCTS

123. **Velvet Bean Meal** is ground velvet beans containing only an unavoidable trace of hulls or pods. (Adopted prior to 1928).

124. **Ground Velvet Bean and Pod** is the product derived by grinding velvet beans with the pod. It contains no additional pods or other materials. (Adopted prior to 1928).

WHEAT PRODUCTS

125. **Wheat Bran** is the coarse outer covering of the wheat kernel as separated from cleaned and scoured wheat in the usual process of commercial milling. (Adopted prior to 1928).

126. **Wheat Standard Middlings** consists mostly of fine particles of wheat bran, wheat germ, and very little of the fibrous offal obtained from the "tail of the mill." This product must be obtained in the usual commercial process of milling and must not contain more than 9.5 per cent of crude fibre. (Adopted prior to 1928).

127. **Wheat Flour Middlings** shall consist of wheat standard middlings and wheat red dog combined in the proportions obtained in the usual process of milling and must not contain more than 6.0 per cent of crude fibre. (Adopted prior to 1928).

128. **Wheat Red Dog** is a by-product obtained in the usual commercial process of flour milling, consisting principally of aleurone with small quantities

of wheat flour and fine wheat bran particles and must not contain more than 4.0 per cent of crude fibre. (Adopted prior to 1928).

129. Wheat Low-Grade Feed Flour is a by-product obtained in the usual commercial process of flour milling, consisting principally of wheat flour with small quantities of aleurone and fine wheat bran particles and must not contain more than 1.5 per cent of crude fibre. (Adopted prior to 1928).

130. Wheat Bran and Wheat Standard Middlings consist of the two commodities as defined above, mixed in the proportions obtained in the usual process of commercial milling. (Adopted prior to 1928).

131. Hard Wheat Mixed Feed (mill-run wheat feed) consists of wheat bran and wheat flour middlings combined in the proportions obtained in the usual process of commercial milling. This product must not contain more than 9.5 per cent of crude fibre. (Adopted prior to 1928.)

132. Wheat Brown Shorts (Wheat Red Shorts) consists mostly of the fine particles of wheat bran, wheat germ and very little of the fibrous offal obtained from the "tail of the mill." This product must be obtained in the usual commercial process of milling and must not contain more than 7.5 per cent of crude fibre. (Adopted prior to 1928).

133. Wheat Gray Shorts (Wheat Gray Middlings or Wheat Total Shorts) consists of the fine particles of the outer bran, the inner bran or bee-wing bran, the germ and the offal or fibrous materials obtained from the "tail of the mill." This product must be obtained in the usual process of commercial milling and must not contain more than 6.0 per cent of crude fibre. (Adopted prior to 1928).

134. Wheat White Shorts or Wheat White Middlings consists of a small portion of the fine wheat bran particles and the wheat germ and a large portion of the fibrous offal obtained from the "tail of the mill." This product must be obtained in the usual process of flour milling and must not contain more than 3.5 per cent of crude fibre. (Adopted prior to 1928).

135. Wheat Mixed Feed (mill-run wheat feed) consists of wheat bran and the gray or total shorts combined in the proportions obtained in the usual process of commercial milling. This product must not contain more than 8.5 per cent of crude fibre. (Adopted prior to 1928).

RECOGNIZED ENGLISH NAME AND ENGLISH SYNONYM, IF ANY	ARTICLE OR SUBSTANCE INDICATED BY THE NAME AND SYNONYM
Capiscum; Red Pepper	The dried, ripe fruit of any species of Capsicum.
Cupric Sulphate; Copper Sulphate	Crystallized copper sulphate with impurities not exceeding commercial grade.
Ferric Oxide; Red Oxide of Iron	Ferric oxide with impurities not exceeding commercial grade.
Ferrous Sulphate	Crystallized ferrous sulphate with impurities not exceeding commercial grade.
Dextrose	A refined, crystallized sugar obtained chiefly by the hydrolysis of starch or of a starch-containing substance.
Glucose	A syrup obtained by the incomplete hydrolysis of starch or of a starch-containing substance.

RECOGNIZED ENGISH NAME AND ENGLISH SYNONYM, IF ANY	ARTICLE OR SUBSTANCE INDICATED BY THE NAME AND SYNONYM
Lactose; Milk Sugar	A sugar obtained from cow's milk.
Magnesium Sulphate; Epsom Salt	Magnesium sulphate with impurities not exceeding commercial grade.
Potassium Bitartrate; Cream of Tartar	Potassium bitartrate with impurities not exceeding commercial grade.
Potassium Nitrate; Saltpeter	Potassium nitrate with impurities not exceeding commercial grade.
Sodium Nitrate; Chili Saltpeter	Sodium nitrate with impurities not exceeding commercial grade.
Sodium Bicarbonate	Sodium bicarbonate with impurities not exceeding commercial grade.
Sodium Chloride; Common Salt	Sodium chloride with impurities not exceeding commercial grade.
Sodium Sulphate; Glauber's Salt	Sodium sulphate with impurities not exceeding commercial grade.
Sulphur	Sulphur with impurities not exceeding commercial grade.
Calcium Phosphate	Tricalcium salt of phosphoric acid with impurities not exceeding commercial grade.
Dicalcium Phosphate	Dicalcium salt of phosphoric acid with impurities not exceeding commercial grade.
Bone Ash	The ash obtained by burning bones with free access of air and containing 15.3—16.6% P.
Precipitated Calcium Carbonate; Precipitated Chalk	Precipitated calcium carbonate with impurities not exceeding commercial grade.
Rock Phosphate	Ground phosphate rock of commercial grade.
Phosphatic Limestone	Ground phosphate—containing limestone of commercial grade.
Limestone; Calcite	Ground calcium limestone of commercial grade.
Dolomitic Limestone; Dolomite	Ground calcium-magnesium limestone of commercial grade.
Shell	Ground shells of oysters or of other mollusks.
Oyster Shell	Ground shells of oysters.

(Adopted 1935)

REQUESTS FOR THE ANALYSIS OF FEEDING STUFFS BY INDIVIDUALS

Under the Feeding Stuffs Law the Agricultural Experiment Station is charged only with the analysis of samples of feeding stuffs collected by the State Inspector under the direction of the Commissioner of Agriculture. It does, however, each year analyze a considerable number of samples drawn by individuals representing stock purchased by them for their own use. The object of the purchaser who asks to have the sample analyzed is usually to satisfy himself whether the feed meets its guarantee and if it does not, to obtain evidence upon which to base a claim for shortage.

The Station can assume no responsibility for the sampling of these unofficial samples but can only attest the accuracy of the analysis of the sample as submitted. It is practically impossible to secure a representative sample of a feeding stuff composed of several ingredients varying widely in composition without the aid of a sampling tube for drawing the sample and proper equipment for mixing it. A feed may contain as one of its ingredients gluten meal averaging 40 per cent protein, and as another ingredient oat feed averaging five per cent protein. These materials are so different in physical condition that the shaking in transit tends to separate them even though they may have been perfectly mixed by the manufacturer before bagging. It is apparent that an accurate sample of a ton of this feed can only be had by drawing a core from several bags. The official method requires ten. Since a representative sample is as essential as an accurate analysis in judging the value of a shipment of feed, it is evident that a satisfactory adjustment can seldom be effected on the basis of an unofficial sample.

Notwithstanding the objections which may be raised to the analysis of samples taken without proper sampling equipment, the Station is disposed to continue this work as long as there is evidence that it constitutes a useful service. The samples so submitted should be drawn from at least ten bags in a manner which will insure that the small lot sent for analysis is as accurately representative as possible

of the larger lot from which it is taken. Because of the cost of labor and materials, an analysis is not usually warranted on a sample drawn from less than a one ton lot of feed.

A one pound sample is sufficient for the analysis. It should be sent in a glass jar or tin box to prevent the loss of fine particles and a change in the moisture content. In order that the Department may have a satisfactory record of the sample analyzed and may know whether or not the manufacturer and the dealer are complying with the requirements of the law, the following information should be submitted concerning each sample.

Brand . . . . . .
Manufacturer . . . . . .
Address . . . . . .
Guarantee:
Protein . . . . . .
Fat . . . . . .
Carbohydrates . . . . . .
Moisture . . . . . .
Ash . . . . . .
Crude Fiber . . . . . .
Ingredients . . . . . .
. . . . . .
. . . . . .
Dealer . . . . . .
Address . . . . . .
Number of bags in lot . . . . . .
Number of bags sampled . . . . . .
Price per 100 pounds . . . . . .
Your name . . . . . .
Your address . . . . . .
Your reason for requesting analysis . . . . . .
. . . . . .

Brand and Manufacturer		Pounds in 100 lbs. of Feeding Stuffs						Certified by Manufacturer to Contain
		Protein	Fat	Carbo-hydrates	Ash	Moisture	Crude Fiber	
ALFALFA LEAF MEAL								
Fernando Alfalfa Leaf Meal	G.*	20.00	2.50	53.00	-	-	18.00	
Fernando Valley Milling and Supply Co. Los Angeles, Cal.	F.*	19.46	2.50	57.04	12.71	8.29	-	
Peevee Alfalfa Leaf Meal	G.	20.00	2.50	58.00	-	-	18.00	
Pecos Valley Alfalfa Mill Co. Hagerman, New Mexico	F.	19.74	2.15	58.76	11.28	8.07	19.39	
ALFALFA MEAL								
Alfalfa Meal	G.	13.00	1.00	40.00	-	-	33.00	
A. B. Caple Co. Toledo, Ohio	F.	13.66	1.32	68.16	7.12	9.74	37.81	
Triple XXX Alfalfa Meal	G.	13.00	1.00	68.00	-	-	33.00	
Denver Alfalfa Milling & Products Co. Lamar, Colo.	F.	12.93	1.44	67.88	8.21	9.54	-	
Pecos Special Alfalfa Meal	G.	13.00	1.50	69.00	-	-	33.00	
Pecos Valley Alfalfa Mill Co. Hagerman, New Mexico	F.	14.28	1.44	67.91	10.00	6.37	-	
CALF MEAL								
Albers Calf Manna	G.	25.00	4.00	53.00	-	12.00	5.00	Dried skimmed milk, oat meal, corn meal, meat extract, linseed meal, barley, wheat, wheat brown shorts, dextrose, soybean oil meal, cocoanut oil meal, cod liver oil, oyster shell flour, steamed bone meal, iodized salt, anise.
Albers Bros. Milling Co. Seattle, Wash.	F.	25.13	5.67	54.46	6.67	8.07	2.89	

* These letters indicate respectively guaranteed and found.

Beacon Calf Grain Ration . . .	G.	15.00	4.00	50.00	-	-	10.00	Linseed meal, wheat bran, mill run screenings, corn meal, crushed oats, molasses, anti-rachitic oil, calcium carbonate, calcium phosphate, salt.
Beacon Milling Co.	F.	14.63	4.80	62.93	8.17	9.47	7.93	
Cayuga, N. Y.								
Granite State Calf Meal . . .	G.	18.00	3.50	55.00	-	-	4.00	Corn meal, rolled oats, wheat bran, linseed meal, fish meal, dried skimmed milk, kelp, calcium carbonate, bone meal, cod liver oil.
E. C. & W. L. Hopkins . . .	F.	18.56	4.65	58.71	7.51	10.57	3.70	
Greenfield, N. H.								
Purina Calf Startena	G.	19.50	3.00	52.50	-	-	9.50	Carotene, dried skimmed milk, linseed meal, soybean oil meal, blood flour, second clear wheat flour, corn meal, dried beet pulp, oats, alfalfa meal, wheat middlings, wheat bran, molasses, calcium carbonate, iodized salt.
Purina Mills	F.	18.56	3.03	58.48	9.52	10.41	9.02	
St. Louis, Mo.								
36% COTTONSEED MEAL								
Atlas 36% Cottonseed Meal . .	G.	36.00	5.00	41.00	-	-	16.00	
E. T. Allen Co.	F.	35.11	5.37	45.57	5.36	8.59	-	
Atlanta, Ga.								
41% COTTONSEED MEAL								
Cow-Eta Brand 41% Cottonseed Meal	G.	41.00	5.00	38.00	-	-	13.00	
Ashcraft-Wilkinson Co. . . .	F.	41.50	6.19	39.71	5.80	6.80	-	
Atlanta, Ga.								
Gold Dust Brand Cottonseed Meal	G.	41.00	6.00	22.00	-	-	10.00	
Georgia Distributing Co. . .	F.	41.37	6.69	37.74	6.11	8.09	-	
Atlanta, Ga.								

Brand and Manufacturer		Pounds in 100 lbs. of Feeding Stuffs						Certified by Manufacturer to Contain
		Protein	Fat	Carbo-hydrates	Ash	Moisture	Crude Fiber	
Dixie Brand Cottonseed Meal	G.	41.00	5.00	26.00	-	-	12.00	
Humphreys-Godwin Co.	F.	40.43	6.62	39.44	6.40	7.11	-	
Memphis, Tenn.								
Lovit Brand 41% Protein Cotton-seed Meal	G.	41.00	5.00	38.00	-	-	13.00	
L. B. Lovitt & Co.	F.	41.15	5.74	40.59	5.69	6.83	-	
Memphis, Tenn.								
41% Protein Cottonseed Meal	G.	41.00	5.00	36.00	-	-	11.00	
Maurice Pincoffs Co.	F.	39.28	5.30	40.63	5.96	8.83	-	
Houston, Texas								
DAIRY FEED								
Empire 16 1/2% Dairy Ration	G.	16.50	3.50	57.00	-	-	12.00	Corn distillers' dried grains, brewers' dried grains, soybean oil meal, corn gluten feed, corn gluten meal, cottonseed meal, corn meal, wheat bran, screenings from flax, wheat, corn, oats and barley, clipped oat by-products, cane molasses, limestone, salt.
Allied Mills	F.	17.16	3.50	61.84	7.34	10.16	10.84	
Chicago, Ill.								
Empire 20% Dairy Ration . . .	G.	20.00	3.00	52.00	-	-	12.00	Soybean oil meal, cottonseed meal, wheat bran, screenings from flax, wheat, corn, oats and barley, clipped oat by-products, cane molasses, limestone, salt.
Allied Mills	F.	21.80	4.34	56.34	7.63	9.89	9.02	
Chicago, Ill.								

Empire 24% Dairy Ration . . .	G.	24.00	3.50	50.00	-	-	12.00	Corn distillers' dried grains, brewers' dried grains, soybean oil meal, corn gluten feed, cottonseed meal, corn meal, wheat bran, screenings from flax, wheat, corn, oats and barley, clipped oat by-products, cane molasses, limestone, salt.
Allied Mills	F.	24.95	4.34	54.38	6.82	9.51	10.59	
Chicago, Ill.								
Wayne Amco 20% Dairy Ration	G.	20.00	4.00	54.00	-	-	9.00	Cottonseed meal, brewers' dried grains, distillers' corn dried grains, oats, corn gluten feed, corn meal, hominy meal, soybean oil meal, corn gluten meal, linseed meal, wheat bran, cane molasses, steamed bone meal, limestone, salt, iron oxide, potassium iodide.
Allied Mills	F.	21.27	5.25	57.72	6.67	9.09	8.26	
Chicago, Ill.								
Wayne Amco 24% Dairy Ration.	G.	24.00	4.00	49.00	-	-	9.00	Cottonseed meal, corn gluten meal, distillers' corn dried grains, bresers' dried grains, corn gluten feed, linseed meal, soybean oil meal, peanut oil meal, oats, corn meal, hominy meal, wheat bran, cane molasses, steamed bone meal, limestone, salt, iron oxide, potassium iodide.
Allied Mills	F.	24.34	5.24	54.67	7.29	8.46	8.24	
Chicago, Ill.								
Barco 16% Dairy Ration . . .	G.	16.00	5.00	60.00	-	-	9.00	Corn gluten feed, linseed meal, hominy feed, cottonseed meal, oats, wheat bran, bone meal, calcium carbonate, salt.
G. N. Bartemus Co.	F.	15.78	5.75	61.39	6.82	10.26	6.22	
Concord, N.H.								
Barco 20% Dairy Ration . . .	G.	20.00	4.25	55.00	-	-	7.50	White hominy feed, cottonseed meal, linseed meal, corn meal, oats, wheat bran, corn gluten feed, wheat middlings, bone meal, calcium carbonate, salt.
G. N. Bartemus Co.	F.	21.49	4.56	58.03	6.61	9.31	7.13	
Concord, N. H.								

Brand and Manufacturer		Pounds in 100 lbs. of Feeding Stuffs						Certified by Manufacturer to Contain
		Protein	Fat	Carbo-hydrates	Ash	Moisture	Crude Fiber	
Barco 24% Dairy Ration	G.	24.00	4.45	55.00	-	-	9.00	Corn gluten feed, linseed meal, hominy feed, cottonseed meal, oats, wheat bran, corn meal, bone meal, calcium carbonate, salt
G. N. Bartemus Co. Concord, N.H.	F.	26.05	4.46	52.07	8.16	9.26	7.53	
Concord 20% Sweetened Ration	G.	20.00	3.00	45.00	-	-	9.00	Corn gluten feed, wheat bran, corn gluten meal, hominy feed, cottonseed meal, brewers' dried grains, linseed meal, molasses, bone meal, limestone, salt.
G. N. Bartemus Co. Concord, N. H.	F.	22.15	3.81	55.85	7.91	10.28	6.51	
Hillsboro 20% Dairy Ration	G.	20.00	4.50	50.00	-	-	8.00	Wheat bran, corn meal, oats, corn gluten feed, cottonseed meal, soybean oil meal, linseed meal, corn distillers' dried grains, molasses, limestone, salt.
G. N. Bartemus Co. Concord, N. H.	F.	22.11	5.33	55.96	6.21	10.39	6.92	
New Deal Dairy Ration	G.	20.00	5.00	58.00	-	-	11.00	Corn gluten feed, hominy feed, linseed meal, bone meal, brewers' dried grains, cottonseed meal, wheat middlings, calcium carbonate, molasses, wheat bran, salt, oat mill feed.
G. N. Bartemus Co. Concord, N. H.	F.	20.57	5.11	57.49	7.52	9.31	11.00	
Special 20% Dairy Sweetened	G.	20.00	3.65	48.00	-	-	10.00	Corn gluten feed, wheat middlings, oat mill feed, corn meal, wheat bran, cottonseed meal, molasses, salt, bone meal, limestone.
G. N. Bartemus Co. Concord, N. H.	F.	19.65	3.42	59.61	7.87	9.45	8.39	

Capital Dairy Ration	G.	24.00	4.50	55.00	-	-	9.00	Corn gluten feed, linseed oil meal, hominy feed, cotton-seed meal, oats, wheat bran, corn meal, soybean oil meal, bone meal, calcium carbonate, salt, molasses.
E. W. Bailey & Co.	F.	23.14	4.50	54.56	7.81	9.99	7.06	
Montpelier, Vt.								
Favorite Dairy Ration Sweetened	G.	20.00	4.00	55.00	-	-	7.50	White hominy feed, cottonseed meal, linseed meal, corn meal, oats, wheat bran, soybean oil meal, corn gluten feed, standard wheat middlings, bone meal, calcium carbonate, salt molasses.
E. W. Bailey & Co.	F.	22.15	4.60	55.01	8.09	10.15	6.38	
Montpelier, Vt.								
New Deal Dairy Ration	G.	20.00	5.00	58.00	-	-	11.00	Corn gluten feed, white hominy feed, brewers' dried grains, cottonseed meal, linseed oil meal, standard wheat middlings, wheat bran, oat meal mill by-products, salt, bone meal, calcium carbonate, molasses.
E. W. Bailey & Co.	F.	20.09	4.73	57.50	7.22	10.46	10.37	
Montpelier, Vt.								
Our 20 Special	G.	20.00	3.50	55.00	-	-	9.00	Corn gluten feed, standard wheat middlings, oat meal mill by-products, corn meal, wheat bran, cottonseed meal, molasses, salt, bone meal, calcium carbonate, soybean oil meal.
E. W. Bailey & Co.	F.	20.22	4.10	57.57	8.46	9.65	8.63	
Montpelier, Vt.								
Auburn Dairy Feed	G.	20.00	4.00	50.00	-	-	10.00	Corn gluten feed, linseed meal, oats, corn meal, screenings from corn, oats, barley, wheat, milo and buckwheat, cottonseed meal, wheat bran, barley, brewers' dried grains, molasses, salt, calcium phosphate, calcium carbonate, distillers' corn dried grains, soybean oil meal.
Beacon Milling Co.	F.	21.10	4.09	57.37	8.10	9.34	9.21	
Cayuga, N. Y.								

Brand and Manufacturer		Pounds in 100 lbs. of Feeding Stuffs						Certified by Manufacturer to Contain
		Protein	Fat	Carbo-hydrates	Ash	Moisture	Crude Fiber	
Beacon Dairy Ration	G.	24.00	4.50	50.00	-	-	9.00	Linseed meal, soybean oil meal, corn gluten feed, distillers' corn dried grains, barley, corn gluten meal, hominy feed, corn meal, cottonseed meal, oats, wheat bran, wheat middlings, mill run screenings, calcium carbonate, calcium phosphate, salt.
Beacon Milling Co. Cayuga, N. Y.	F.	24.43	4.59	54.47	7.98	8.53	7.92	
Beacon 20	G.	20.00	4.50	55.00	-	-	9.00	Linseed meal, cottonseed meal, soybean oil meal, corn gluten feed, corn gluten meal, corn meal, wheat bran, mill run screenings, distillers' corn dried grains, barley, salt, calcium phosphate, calcium carbonate.
Beacon Milling Co. Cayuga, N. Y.	F.	22.02	4.66	57.43	6.26	9.63	8.12	
Beacon 24 Sweet	G.	24.00	4.00	50.00	-	-	9.00	Linseed meal, soybean oil meal, corn gluten meal, cottonseed meal, corn gluten feed, corn meal, brewers' dried grains, distillers' corn dried grains, wheat bran, wheat middlings, oats, barley, molasses, salt, calcium carbonate.
Beacon Milling Co. Cayuga, N. Y.	F.	24.95	4.04	53.89	8.09	9.03	7.94	
Dairy-Aide 24% Ration	G.	24.00	4.00	55.00	-	-	11.00	Wheat bran, wheat middlings, barley, brewers' dried grains, distillers' dried grains, grain screenings, soybean oil meal, cottonseed meal, peanut meal, molasses, calcium carbonate, bone meal, salt.
E. A. Cowee Co. Fitchburg, Mass.	F.	21.66	4.11	56.94	7.26	10.03	8.29	

Royal 20% Dairy Ration	G.	20.00	4.00	45.00	-	-	11.00	Soybean oil meal, corn gluten feed, distillers' corn dried grains, wheat bran, molasses, cottonseed meal, corn meal, oats, calcium carbonate, salt.
E. A. Cowee Co.	F.	20.71	4.01	59.62	6.50	9.16	13.41	
Fitchburg, Mass.								
Royal 24% Dairy Ration . . .	G.	24.00	4.00	50.00	-	-	11.00	Soybean oil meal, corn meal, oats, corn gluten feed, wheat bran, distillers' dried grains, cottonseed meal, palm kernel meal, molasses, calcium carbonate, salt.
E. A. Cowee Co.	F.	25.39	4.23	54.75	6.51	9.12	11.37	
Fitchburg, Mass.								
Champion Dairy Ration . . .	G.	24.00	4.75	50.00	-	-	8.50	Wheat bran, cottonseed meal, corn gluten feed, corn gluten meal, linseed meal, oats, corn meal or hominy feed, brewers' dried grains, distillers' dried grains, wheat middlings, salt, bone meal.
G. B. Currier Co.	F.	24.78	5.33	55.31	6.18	8.40	8.21	
Colebrook, N. H.								
Danville 20% Dairy Ration . .	G.	20.00	4.00	55.00	-	-	10.00	Linseed meal, cottonseed meal, corn gluten feed, standard wheat bran, standard wheat middlings, corn gluten meal, malt sprouts, oats, corn meal, molasses, calcium carbonate, salt.
Danville Grain Co.	F.	21.06	3.54	56.69	8.42	10.29	9.15	
Danville, Vt.								
Delaware Sweet 20% Dairy Feed	G.	20.00	4.00	50.00	-	-	10.00	Cane molasses, linseed meal, soybean oil meal, cottonseed meal, corn gluten feed, wheat bran, wheat middlings, corn meal or hominy feed, oats, phosphatic calcium carbonate, salt.
Delaware Mills	F.	21.41	3.72	56,87	7.21	10.79	8.82	
Deposit, N. Y.								

Brand and Manufacturer		Pounds in 100 lbs. of Feeding Stuffs						Certified by Manufacturer to Contain
		Protein	Fat	Carbo-hydrates	Ash	Moisture	Crude Fiber	
Delaware Sweet 24% Dairy Feed Delaware Mills Deposit, N. Y.	G.	24.00	4.50	50.00	-	-	9.00	Cane molasses, corn gluten feed, corn gluten meal, linseed meal, cottonseed meal, soybean oil meal, hominy feed, peanut oil meal, corn meal, wheat bran, wheat middlings, salt, phosphatic calcium carbonate.
	F.	25.39	4.96	52.53	7.58	9.54	7.63	
Hayward Dairy Ration Delaware Mills Deposit, N. Y.	G.	20.00	4.50	55.00	-	-	8.00	Wheat bran, soybean oil meal, cottonseed meal, brewers' dried grains, corn gluten feed, oats, hominy, molasses, bone meal, calcium carbonate, salt.
	F.	22.86	3.99	55.05	7.23	10.87	8.30	
Hayward Fitting Ration Open Formula Delaware Mills Deposit, N. Y.	G.	12.00	3.50	60.00	-	-	11.00	Wheat bran, oats, hominy, molasses, alfalfa meal, linseed meal, corn gluten feed, calcium carbonate, salt.
	F.	15.45	3.50	61.01	7.97	12.07	7.50	
Indian Sweet 20% Dairy Feed Delaware Mills Deposit, N. Y.	G.	20.00	4.00	50.00	-	-	12.00	Cane molasses, linseed meal, corn gluten feed, cottonseed meal, soybean oil meal, peanut oil meal, wheat bran, wheat middlings, corn meal, oat feed, buckwheat, phosphatic calcium carbonate, salt.
	F.	22.51	3.82	55.73	8.60	9.34	10.03	
Big 4 Feed Dietrich & Gambrill Frederick, Md.	G.	12.00	2.50	62.00	-	-	16.00	Alfalfa meal, wheat bran, brewers' dried grains, dried beet pulp, molasses, salt, bone meal, calcium carbonate, potassium iodide.
	F.	14.89	2.81	62.96	8.02	11.32	13.62	

Gambrill's A 1 Dairy Feed . .	G.	24.00	4.60	51.00	-	-	9.00	Corn gluten feed, cotton-
Dietrich & Gambrill	F.	26.27	4.85	51.81	7.43	9.64	9.48	seed meal, linseed meal, peanut meal, dried brewers' grains, wheat bran, corn feed meal, wheat middlings, oats, molasses, calcium carbonate, bone meal, salt.
Frederick, Md.								
Gambrills' High Protein Dairy Feed	G.	32.00	4.00	45.00	-	-	9.00	Cottonseed meal, linseed meal, peanut meal, soybean oil meal, corn gluten feed, wheat bran, dried brewers' grains, molasses, bone meal, calcium carbonate, salt, potassium iodide.
Dietrich & Gambrill	F.	32.53	4.56	46.00	8.05	8.86	8.77	
Frederick, Md.								
Pen-Mar Dairy Feed	G.	20.00	4.00	56.00	-	-	9.00	Corn gluten feed, cottonseed meal, linseed meal, peanut meal, brewers' dried grains, oats, corn feed meal, wheat bran, wheat middlings, molasses, calcium carbonate, bone meal, salt, potassium iodide.
Dietrick & Gambrill	F.	22.85	4.00	53.04	8.09	12.02	7.56	
Frederick, Md.								
Eastern States Fitting Ration	G.	12.00	3.50	59.00	-	-	8.00	Oats, yellow corn meal, wheat bran, mill run wheat screenings, barley, cane molasses, alfalfa leaf meal, linseed meal, soybean oil meal, sardine oil, dicalcium phosphate, salt.
Eastern States Farmers' Exchange	F.	14.45	4.75	64.30	6.07	10.43	6.49	
Springfield, Mass.								
Eastern States Fulpail Dairy Ration	G.	20.00	4.50	53.00	-	-	8.50	Distillers' corn dried grains, oats, wheat bran, mill run wheat screenings, yellow corn feed meal, cottonseed meal, cane molasses, soybean oil meal, corn gluten feed, linseed meal, barley, dicalcium phosphate, salt.
Eastern States Farmers' Exchange	F.	21.71	4.86	58.31	5.81	9.31	7.36	
Springfield, Mass.								

Brand and Manufacturer	Pounds in 100 lbs. of Feeding Stuffs						Certified by Manufacturer to Contain
	Protein	Fat	Carbo-hydrates	Ash	Moisture	Crude Fiber	
Eastern States Highland 12 Dairy Ration . . . . . Eastern States Farmers' Exchange . . . . . Springfield, Mass.	G. 12.00	3.00	61.00	-	-	11.00	Yellow corn meal, oat mill feed, wheat bran, mill run wheat screenings, barley, cane molasses, distillers' corn dried grains, soybean oil meal, alfalfa leaf meal, calcium carbonate, salt.
	F. 14.32	3.89	65.80	6.63	9.36	10.73	
Eastern States Highland 20 Dairy Ration . . . . . Eastern States Farmers' Exchange . . . . . Springfield, Mass.	G. 20.00	4.00	53.00	-	-	11.50	Oat mill feed, distillers' corn dried grains, cotton-seed meal, cane molasses, soybean oil meal, yellow hominy feed, barley, wheat bran, mill run wheat screenings, corn gluten feed, peanut oil meal, calcium carbonate, salt.
	F. 21.71	4.41	58.58	6.73	8.57	10.89	
Eastern States Milkmore Dairy Ration . . . . . Eastern States Farmers' Exchange . . . . . Springfield, Mass.	G. 24.00	4.50	49.00	-	-	9.00	Cottonseed meal, distillers' corn dried grains, wheat bran, mill run wheat screenings, soybean oil meal, oats, corn gluten feed, cane molasses, yellow corn feed meal, linseed meal, dicalcium phosphate, salt.
	F. 26.88	4.50	51.92	6.69	10.01	7.93	
Eastern States Sixteen Dairy Ration . . . . . Eastern States Farmers' Exchange . . . . . Springfield, Mass.	G. 16.00	4.00	56.00	-	-	8.00	Yellow corn feed meal, oats, wheat bran, mill run wheat screenings, distillers' corn dried grains, cane molasses, corn gluten feed, barley, cottonseed meal, linseed meal, soybean oil meal, dicalcium phosphate, salt.
	F. 17.38	4.10	61.94	5.71	10.87	6.85	

Eastern States 32% Supplement Feed	G.	32.00	4.50	40.00	-	-	8.00	Cottonseed meal, soybean oil meal, distillers' corn dried grains, corn gluten meal, linseed meal, cane molasses, wheat bran, mill run wheat screenings, discalcium phosphate, salt.
Eastern States Farmers' Exchange Springfield, Mass.	F.	34.50	4.59	43.88	7.29	9.74	7.28	
Countryside 20% Dairy Ration	G.	20.00	3.50	55.00	-	-	12.00	Wheat bran, brewers' dried grains, cottonseed meal, soybean oil meal, wheat screenings, malt sprouts, oat mill feed, bone meal, molasses, calcium carbonate, salt.
Economy Grocery Stores Corp. Boston, Mass.	F.	20.00	3.21	57.14	8.68	10.97	12.38	
Granger 20% Dairy Ration	G.	20.00	4.00	55.00	-	-	11.00	Wheat bran, wheat middlings, barley, cottonseed meal, corn gluten feed, corn meal or hominy feed, soybean oil meal, cane molasses, wheat screenings, calcium carbonate, salt, oats, copra oil meal, brewers' dried grains.
Elmore Milling Co. Oneonta, N. Y.	F.	21.27	4.21	58.34	6.85	9.33	10.68	
Granger 24% Dairy Ration	G.	24.00	4.00	45.00	-	-	10.00	Wheat bran, wheat middlings, cottonseed meal, barley, soybean oil meal, corn gluten feed, cane molasses, wheat screenings, calcium carbonate, salt, oats, brewers' dried grains.
Elmore Milling Co. Oneonta, N. Y.	F.	26.74	3.52	52.50	7.72	9.52	9.69	
Eshelman Certified 20% Dairy Ration	G.	20.00	4.00	54.00	-	-	8.00	Corn gluten feed, hominy feed, oats, linseed meal, wheat bran, cottonseed meal, soybean oil meal, wheat middlings, corn distillers' dried grains, cane molasses, steamed bone meal, calcium carbonate, salt.
John W. Eshelman & Sons Lancaster, Pa.	F.	23.12	4.23	56.53	6.12	10.00	6.96	

Brand and Manufacturer		Pounds in 100 lbs. of Feeding Stuffs						Certified by Manufacturer to Contain
		Protein	Fat	Carbo-hydrates	Ash	Mois-ture	Crude Fiber	
Eshelman Challenge Dairy Feed John W. Eshelman & Sons . . . . Lancaster, Pa.	G. F.	24.00 24.61	4.00 5.17	58.00 51.69	- 9.12	- 9.41	11.00 8.69	Cottonseed meal, wheat bran, corn gluten feed, cane molasses, corn gluten meal, oats, brewers' dried grains, distillers' corn dried grains, corn meal, linseed meal, soy-bean oil meal, wheat screen-ings, bone meal, calcium car-bonate, salt.
Eshelman Conestoga 20 Dairy Feed . . . . . . John W. Eshelman & Sons . . . . Lancaster, Pa.	G. F.	20.00 23.60	4.00 5.75	55.00 51.12	- 10.78	- 8.75	11.00 9.29	Cottonseed meal, wheat bran, cane molasses, corn gluten feed, brewers' dried grains, distillers' corn dried grains, soybean oil meal, linseed meal, wheat screen-ings, bone meal, calcium carbonate, salt.
Eshelman Lancaster 20 Dairy Feed . . . . . . John W. Eshelman & Sons . . . . Lancaster, Pa.	G. F.	20.00 23.47	4.00 4.70	55.00 55.25	- 7.04	- 9.54	11.00 8.66	Wheat bran, cottonseed meal, oats, corn gluten feed, cane molasses, brewers' dried grains, distillers' corn dried grains, corn meal, linseed meal, soybean oil meal, bone meal, calcium carbonate, salt.
Eshelman 32% Mixing Ration . . . John W. Eshelman & Sons . . . Lancaster, Pa.	G. F.	32.00 32.84	4.50 5.76	45.00 45.88	- 7.08	- 8.44	9.00 8.73	Cottonseed meal, corn gluten meal, corn gluten feed, wheat bran, cane molasses, linseed meal, soybean oil meal, dis-tillers' corn dried grains, brewers' dried grains, bone meal, calcium carbonate, salt.

Eshelman Red Rose Fitting Ration	G.	12.00	3.50	61.00	-	-	7.00	Wheat bran, oats, corn meal, hominy feed, linseed meal, soybean oil meal, cane molasses, steamed bone meal, calcium carbonate, salt.
John W. Eshelman & Sons Lancaster, Pa.	F.	15.32	5.23	62.30	7.06	10.09	6.16	
C Dairy	G.	20.00	4.00	53.00	-	-	9.00	Corn meal, wheat bran, oats, corn gluten feed, corn gluten meal, linseed meal, cotton-seed meal, soybean oil meal, cllcium carbonate, salt.
Farm Service Stores Fitchburg, Mass.	F.	22.24	4.64	56.65	6.83	9.64	7.14	
18% Dairy Ration	G.	18.00	3.50	58.00	-	-	13.00	Corn meal, hominy, linseed meal, soybean oil meal, cottonseed meal, corn gluten feed, dried brewers' grains, wheat bran, wheat screenings, oat middlings, calcium carbonate, molasses, salt.
Farm Service Stores Fitchburg, Mass.	F.	18.82	4.18	60.84	7.10	9.06	14.09	
Wilbur Dairy	G.	20.00	5.00	55.00	-	-	9.00	Hominy feed, wheat bran, wheat screenings, cottonseed meal, brewers' dried grains, molasses, linseed meal, soy-bean oil meal, oats, corn gluten feed, calcium car-bonate, salt.
Farm Service Stores Fitchburg, Mass.	F.	20.84	4.89	56.68	6.52	11.07	7.74	
Brookside 16 Dairy Ration	G.	16.00	3.50	57.00	-	-	12.00	Corn gluten meal, corn gluten feed, soybean oil meal, linseed meal, rye dis-tillers' dried grains, oat meal mill by-products, hominy feed, screenings from wheat, barley, flax, wheat bran, cane molasses, steamed bone meal, calcium carbonate, salt.
First National Stores Somerville, Mass.	F.	18.21	3.74	58.07	11.29	8.69	11.78	

Brand and Manufacturer		Pounds in 100 lbs. of Feeding Stuffs						Certified by Manufacturer to Contain
		Protein	Fat	Carbo-hydrates	Ash	Moisture	Crude Fiber	
Brookside Dairy Ration	G.	20.00	3.50	56.00	-	-	10.00	Distillers' Corn dried grains, corn gluten feed, linseed meal, cottonseed meal, soybean oil meal, wheat bran, wheat middlings, mill run screenings, corn meal, cane molasses, steamed bone meal, calcium carbonate, salt.
First National Stores, Somerville, Mass.	F.	23.77	3.90	56.34	6.62	9.37	9.33	
Our Mix Dairy Ration	G.	22.00	4.50	53.00	-	-	8.00	Hominy feed, wheat bran, brewers' dried grains, cottonseed meal, standard wheat middlings, corn gluten feed, soybean oil meal or linseed meal, molasses, salt, bone meal, calcium carbonate.
Grafton County Feed Co., North Haverhill, N. H.	F.	23.12	4.88	54.54	7.97	9.49	7.95	
Grandin's Milk Maker	G.	20.00	5.00	50.00	-	-	12.00	Dried beet pulp, cottonseed meal, soybean oil meal, linseed meal, corn gluten feed, wheat bran, wheat middlings, mill run wheat screenings, corn meal, corn feed meal, hominy feed, steamed bone meal, calcium carbonate, salt.
D. H. Grandin Milling Co., Jamestown, N. Y.	F.	23.12	5.00	53.92	8.32	9.64	8.01	
Grandin's Sweetened 20% Dairy Feed	G.	20.00	4.00	50.00	-	-	10.00	Cane molasses, cottonseed meal, soybean oil meal, linseed meal, corn gluten feed, wheat bran, wheat middlings, mill run wheat screenings, corn meal, corn feed meal, hominy feed, steamed bone meal, calcium carbonate, salt.
D. H. Grandin Milling Co., Jamestown, N. Y.	F.	21.32	4.28	56.16	7.64	10.60	7.07	

Grandin's Twin Six Dairy Feed Sweetened . . . . . D. H. Grandin Milling Co. . Jamestown, N. Y.	G.	22.00	5.00	50.00	-	-	12.00	Cane molasses, cottonseed meal, soybean oil meal, linseed meal, corn gluten feed, wheat bran, wheat middlings, mill run wheat screenings, corn meal, corn feed meal, hominy feed, alfalfa meal, steamed bone meal, calcium carbonate, salt.
	F.	23.64	4.42	53.49	7.94	10.51	7.65	
M-S (Money Saver) 20% Sweetened Dairy Feed . . . . D. H. Grandin Milling Co. .. Jamestown, N. Y.	G.	20.00	3.50	50.00	-	-	12.00	Cane molasses, cottonseed meal, soybean oil meal, linseed meal, corn gluten feed, distillers' corn dried grains, brewers' dried grains, wheat bran, wheat middlings, screenings from corn, wheat, oats and barley, oat mill feed, steamed bone meal, calcium carbonate, salt.
	F.	21.40	4.08	58.04	7.65	8.83	12.19	
Milky Way Dairy Feed 20% . . Great Atlantic & Pacific Tea Co. . . . . New York, N. Y.	G.	20.00	3.50	56.00	-	-	9.00	Corn feed meal, dried grains from barley, malt and corn, wheat bran, cottonseed meal, wheat standard middlings, oats, barley, molasses, linseed meal, corn gluten meal, corn gluten feed, calcium carbonate, salt, soybean oil meal, malt sprouts.
	F.	22.81	4.07	56.51	6.30	10.31	8.46	
Milky Way Dairy Feed 24% . . Great Atlantic & Pacific Tea Co. . . . . New York, N. Y.	G.	24.00	3.50	52.00	-	-	9.00	Corn feed meal, barley, malt, wheat bran, cottonseed meal, wheat standard middlings, oats, barley, molasses, linseed meal, corn gluten meal, corn gluten feed, calcium carbonate, salt, soybean oil meal, malt sprouts.
	F.	25.74	4.13	52.82	8.19	9.12	8.62	

Brand and Manufacturer	Pounds in 100 lbs. of Feeding Stuffs						Certified by Manufacturer to Contain
	Protein	Fat	Carbo-hydrates	Ash	Moisture	Crude Fiber	
Granite State Fitting Ration E. C. & W. L. Hopkins . . . . Greenfield, N. H.	G. 12.00 F. 15.50	3.50 5.54	54.00 59.85	- 6.98	- 12.13	8.00 6.94	Wheat bran, wheat middlings, corn meal, hominy feed, molasses, oats, linseed meal, soybean oil meal, calcium carbonate, kelp.
Granite State 20% Dairy Feed E. C. & W. L. Hopkins . . . . Greenfield, N. H.	G. 20.00 F. 21.93	4.00 4.52	50.00 55.12	- 8.76	- 9.67	11.00 8.50	Corn meal, corn gluten feed, cottonseed meal, linseed meal, malt grains, wheat bran, soybean oil meal, distillers' corn dried grains, molasses, bone meal, calcium carbonate, kelp.
Granite State 24% Dairy Feed E. C. & W. L. Hopkins . . . . Greenfield, N. H.	G. 24.00 F. 24.30	4.00 4.17	48.00 51.72	- 9.89	- 9.92	10.00 9.00	Corn gluten feed, corn meal or hominy, linseed meal, wheat bran, cottonseed meal, malt grains, molasses, barley, oats, distillers' corn dried grains, soybean oil meal, bone meal, calcium carbonate, kelp.
20% Open Formula Dairy Feed E. C. & W. L. Hopkins . . . Greenfield, N. H.	G. 20.00 F. 22.11	4.50 5.76	53.00 54.52	- 7.92	- 9.69	8.00 7.51	Yellow hominy feed, wheat bran, distillers' dried grains, corn gluten feed, cottonseed meal, soybean oil meal, molasses, oats, dicalcium phosphate, salt.
P and Q 20% Dairy . . . . . E. C. & W. L. Hopkins . . . . Greenfield, N. H.	G. 20.00 F. 21.23	3.50 4.08	50.00 54.96	- 10.57	- 9.16	11.00 10.89	Wheat bran, wheat middlings, corn gluten meal, distillers' dried grains, soybean oil meal, cottonseed meal, oat mill feed, calcium carbonate, salt, molasses.

P and Q 24% Dairy	G.	24.00	3.50	50.00	-	-	10.00	Wheat bran, wheat middlings, corn gluten meal, distillers' dried grains, soybean oil meal, cottonseed meal, oat mill feed, calcium carbonate, salt, hominy, molasses.
E. C. & W. L. Hopkins . . .	F.	25.39	4.81	52.81	9.02	7.97	10.59	
Greenfield, N. H.								
Swain's Dairy Feed	G.	20.00	4.00	55.00	-	-	9.00	Linseed meal, cottonseed meal, corn meal, corn gluten meal, oats, wheat bran, dried beet pulp, calcium carbonate, salt.
E. C. & W. L. Hopkins . . .	F.	23.03	4.97	56.29	6.18	9.53	9.00	
Greenfield, N. H.								
Johnson's Dairy Feed	G.	16.00	3.00	56.00	-	-	9.00	Corn meal, linseed meal, cottonseed meal, oats, wheat bran, corn gluten feed, salt.
Ralph P. Johnson & Son . . .	F.	20.05	3.89	58.90	7.58	9.58	7.00	
Potter Place, N. H.								
Apex 20% Dairy Ration . . .	G.	20.00	3.50	50.00	-	-	12.00	Soybean oil meal, cottonseed meal, corn gluten feed, corn gluten meal, wheat bran, wheat screenings, oat mill feed, malt sprouts, brewers' dried grains, distillers' corn dried grains, cane molasses, salt, calcite.
Kasco Mills	F.	22.46	3.91	55.68	8.13	9.82	10.43	
Waverly, N. Y.								
Beatsall Milk Grains	G.	22.00	4.00	50.00	-	-	10.00	Wheat bran, wheat middlings, linseed meal, corn gluten feed, cottonseed meal, soybean oil meal, hominy feed, salt, calcite, beet pulp, molasses, corn gluten meal, distillers' corn dried grains.
Kasco Mills	F.	23.95	4.20	53.81	8.16	9.88	7.76	
Waverly, N. Y.								
Kasco Fitting Ration	G.	14.00	4.00	55.00	-	-	8.00	Wheat bran, corn feed meal, hominy feed, barley, oats, linseed meal, soybean oil meal, cane molasses, bone meal, salt, calcite.
Kasco Mills	F.	17.38	5.31	58.85	6.93	11.53	6.36	
Waverly, N. Y.								

Brand and Manufacturer	Pounds in 100 lbs. of Feeding Stuffs						Certified by Manufacturer to Contain
	Protein	Fat	Carbo-hydrates	Ash	Moisture	Crude Fiber	
Kasco Open Formula 20% Dairy Ration . . . . . Kasco Mills . . . . . Waverly, N. Y.	G. 20.00 F. 21.54	3.50 4.54	50.00 55.90	- 7.80	- 10.22	10.00 7.89	Wheat bran, wheat middlings, hominy feed, barley, oats, malt sprouts, brewers' dried grains, distillers' corn dried grains, corn gluten feed, soybean oil meal, cottonseed meal, cane molasses, salt, calcite.
Kasco Sweet 16% Dairy Feed Kasco Mills . . . . . Waverly, N. Y.	G. 16.00 F. 19.88	3.50 3.76	50.00 57.45	- 7.96	- 10.95	12.00 8.05	Wheat bran, corn gluten feed, corn gluten meal, cottonseed meal, soybean oil meal, oats, wheat screenings, barley, corn meal, oat mill feed, malt sprouts, brewers' dried grains, distillers' corn dried grains, molasses, salt, calcite.
Larro: The Ready Ration . . Larrowe Milling Co. . . . . Detroit, Mich.	G. 20.00 F. 21.63	3.75 3.75	57.00 59.34	- 6.32	- 8.96	12.00 10.48	Cottonseed meal, yellow corn meal, wheat middlings, soybean oil meal, linseed meal, corn gluten feed, dried beet pulp, wheat bran, salt.
Waugh's Cow Grain . . . . . McQuesten & Lewis Co. . . . Manchester, N.H.	G. 20.00 F. 22.15	4.00 4.62	50.00 56.49	- 6.30	- 10.44	8.40 8.51	Dried beet pulp, corn bran, corn meal, wheat mixed feed, bone meal, alfalfa meal, cottonseed meal, corn gluten meal, linseed meal, oats, calcium carbonate, salt.

B-B Bull Brand 20 Dairy Ration Sweetened	G.	20.00	4.00	55.00	-	-	11.00	Brewers' dried grains, cotton-seed meal, corn gluten feed, soybean oil meal, linseed meal, hominy feed, corn meal, wheat bran, wheat middlings, mill run screenings, molasses, steamed bone meal, calcium carbonate, salt, potassium iodide.
Maritime Milling Co.	F.	22.94	4.01	54.70	8.52	9.83	9.69	
Buffalo, N. Y.								
B-B Hi-Test Dairy Feed Sweetened	G.	20.00	4.00	50.00	-	-	12.00	Brewers' dried grains, cotton-seed meal, corn gluten feed, soybean oil meal, hominy feed, oats, corn meal, screenings from wheat, corn, oats and barley, wheat bran, molasses, steamed bone meal, calcium carbonate, salt.
Maritime Milling Co.	F.	21.45	4.74	53.93	9.55	10.33	11.12	
Buffalo, N. Y.								
B-B Marmico 16% Protein Dairy Feed	G.	16.00	4.00	58.00	-	-	12.00	Brewers' dried grains, soy-bean oil meal, cottonseed meal, corn gluten feed, corn meal, screenings from wheat, corn, oats and barley, wheat bran, molasses, steamed bone meal, calcium carbonate, salt.
Maritime Milling Co.	F.	18.30	4.24	59.53	7.51	10.42	11.63	
Buffalo, N. Y.								
Merrimack Dairy Ration	G.	20.00	4.50	50.00	-	-	10.00	Brewers' dried grains, corn gluten feed, corn meal, cottonseed meal, soybean oil meal, wheat bran, wheat middlings, oats, calcium carbonate, bone meal, salt, linseed meal.
Merrimack Farmers' Exchange .	F.	21.27	4.64	55.70	8.92	9.47	7.56	
Concord, N. H.								

Brand and Manufacturer		Pounds in 100 lbs. of Feeding Stuffs						Certified by Manufacturer to Contain
		Protein	Fat	Carbo-hydrates	Ash	Moisture	Crude Fiber	
Merrimack Eureka Dairy Ration	G.	20.00	4.00	55.00	-	-	11.00	Oat mill feed, corn gluten feed, corn meal, cottonseed meal, wheat bran, corn gluten meal, soybean oil meal, molasses, limestone, salt.
Merrimack Farmers' Exchange. Concord, N. H.	F.	21.14	3.87	57.72	8.26	9.01	11.44	
Merrimack Fitting Ration	G.	14.00	4.50	60.00	-	-	8.00	Soybean oil meal, oats, corn meal, wheat bran, linseed meal, bone meal, calcium carbonate, salt, cane molasses.
Merrimack Farmers' Exchange. Concord, N. H.	F.	13.70	4.50	64.73	5.61	11.46	6.53	
Merrimack Sweetened Milk Ration	G.	20.00	4.00	53.00	-	-	8.00	Wheat bran, wheat middlings, gluten feed, gluten meal, linseed meal, soybean oil meal, cottonseed meal, oats, corn meal, brewers' dried grains, molasses, bone meal, calcium carbonate, salt.
Merrimack Farmers' Exchange. Concord, N. H.	F.	20.88	4.23	56.83	8.98	9.08	7.86	
Morrill's Dairy Ration	G.	20.00	3.50	50.00	-	-	9.00	Corn gluten feed, linseed meal, oats, cottonseed meal, corn meal, wheat bran, salt, calcium carbonate.
J. H. Morrill Laconia, N. H.	F.	22.98	4.69	55.33	6.99	10.01	7.12	
New England Yankee 20 Dairy Ration	G.	20.00	4.00	50.00	-	-	12.00	Brewers' dried grains, cotton-seed meal, corn gluten feed, soybean oil meal, hominy feed, oats, corn meal, screenings from wheat, corn, oats and barley, wheat bran, molasses, steamed bone meal, calcium carbonate, salt.
New England Retail Grain Dealers' Cooperative Association Springfield, Mass.	F.	23.47	4.47	54.33	7.24	10.49	10.68	

New England Yankee 24 Dairy Ration	G.	24.00	4.00	50.00	-	-	12.00	Brewers' dried grains, cottonseed meal, corn gluten feed, soybean oil meal, hominy feed, oats, corn meal, screenings from wheat, corn, oats and barley, wheat bran, molasses, steamed bone meal, calcium carbonate, salt.
New England Retail Grain Dealers' Cooperative Association . . . . . Springfield, Mass.	F.	25.83	4.59	51.60	7.84	10.14	10.38	
Doublex 16% Dairy Ration . .	G.	16.00	3.50	45.00	-	-	11.00	Distillers' corn dried grains, oats, barley, brewers' dried grains, malt sprouts, linseed meal, cottonseed meal, screenings from wheat, oats, barley, buckwheat and milo, soybean oil meal, corn gluten feed, molasses, calcium carbonate, salt.
Park & Pollard Co. . . . . Boston, Mass.	F.	17.34	3.40	60.58	9.17	9.51	13.79	
Doublex XX 20% Dairy Ration	G.	20.00	3.50	50.00	-	-	11.00	Linseed meal, gluten feed, gluten meal, soybean oil meal, distillers' corn dried grains, barley, wheat bran, malt sprouts, cottonseed meal, wheat screenings, molasses, calcium carbonate, salt.
Park & Pollard Co. . . . . Boston, Mass.	F.	21.41	4.20	56.25	9.73	8.41	11.20	
Doublex XX 24% Dairy Ration	G.	24.00	3.50	55.00	-	-	11.00	Wheat bran, linseed meal, soybean oil meal, oats, malt sprouts, corn gluten meal, cottonseed meal, corn gluten feed, wheat screenings, molasses, calcium carbonate, salt.
Park & Pollard Co. . . . . Boston, Mass.	F.	23.86	3.93	53.21	9.81	9.19	11.71	

Brand and Manufacturer	Pounds in 100 lbs. of Feeding Stuffs						Certified by Manufacturer to Contain
	Protein	Fat	Carbo-hydrates	Ash	Moisture	Crude Fiber	
Manamar Fitting Ration . . . Park & Pollard Co. . . . . Boston, Mass.	G. 12.00 F. 13.05	3.50 3.50	55.00 64.69	- 7.53	- 11.23	7.00 6.98	Kelp, fish meal, sea shells, linseed meal, oats, corn meal, wheat bran, cracked corn, molasses, calcium carbonate, salt.
Milk Maid 20% Dairy Ration with Manamar . . . . . . Park & Pollard Co. . . . . Boston, Mass.	G. 20.00 F. 21.80	4.00 4.73	55.00 55.45	- 8.97	- 9.05	9.00 8.56	Kelp, fish meal, sea shells, corn gluten feed, linseed oil meal, cottonseed meal, distillers' dried grains, soybean oil meal, oats, wheat bran, brewers' dried grains, malt sprouts, corn gluten meal, corn meal, cane molasses, calcium carbonate, salt.
Milk Maid 24% Dairy Ration Sweetened . . . . . . Park & Pollard Co. . . . . Boston, Mass.	G. 24.00 F. 24.95	4.00 4.13	50.00 52.87	- 9.08	- 8.97	11.00 9.46	Corn gluten feed, linseed meal, cottonseed meal, distillers' dried grains, soybean oil meal, wheat bran, brewers' dried grains, malt sprouts, corn gluten meal, corn meal, fish meal, molasses, calcium carbonate, salt.
Milk Maid Sweetened 20% Dairy Ration . . . . . . Park & Pollard Co. . . . . Boston, Mass.	G. 20.00 F. 23.21	4.00 4.69	55.00 54.06	- 8.69	- 9.35	9.00 8.67	Corn gluten feed, linseed meal, cottonseed meal, distillers' dried grains, soybean oil meal, oats, wheat bran, brewers' dried grains, malt sprouts, corn gluten meal, corn meal, cane molasses, calcium carbonate, salt.

Protena 20% Dairy Feed . .	G.	20.00	3.50	50.00	-	-	12.00	Linseed meal, soybean oil meal, cottonseed meal, corn gluten feed, wheat middlings, alfalfa meal, wheat bran, screenings from wheat, corn, oats, barley and kafir, molasses, calcium carbonate, iodized salt.
Purina Mills	F.	20.97	3.84	55.55	9.54	10.10	11.04	
St. Louis, Mo.								
Purina Milking Cow Chow 20%	G.	20.00	4.00	57.00	-	-	12.00	Dried beet pulp, linseed meal, soybean oil meal, corn gluten feed, cottonseed meal, distillers' corn dried grains, brewers' dried grains, wheat middlings, wheat bran, corn meal, alfalfa meal, molasses, calcium carbonate, iodized salt.
Purina Mills	F.	21.45	4.25	57.52	7.47	9.31	9.59	
St. Louis, Mo.								
Purina Milking Cow Chow 20% with Yeast	G.	20.00	4.00	57.00	-	-	12.00	Dried beet pulp, linseed meal, soybean oil meal, corn gluten feed, cottonseed meal, distillers' corn dried grains, brewers' dried grains, wheat middlings, wheat bran, corn meal, alfalfa meal, molasses, calcium carbonate, iodized salt, irradiated dry yeast.
Purina Mills	F.	24.08	4.00	54.31	8.41	9.20	10.44	
St. Louis, Mo.								
Purina Milking Cow Chow 24%	G.	24.00	4.00	49.00	-	-	12.00	Linseed meal, soybean oil meal, corn gluten feed, cottonseed meal, distillers' corn dried grains, brewers' dried grains, wheat middlings, wheat bran, alfalfa meal, molasses, calcium carbonate, iodized salt.
Purina Mills	F.	25.87	4.57	51.98	8.09	9.49	10.26	
St. Louis, Mo.								

Brand and Manufacturer	Pounds in 100 lbs. of Feeding Stuffs						Certified by Manufacturer to Contain
		Protein	Fat	Carbo-hydrates	Ash	Moisture	Crude Fiber	
Quaker 20% Dairy Ration . .	G.	20.00	3.00	57.00	-	-	12.00	Hominy feed, yellow hominy feed, barley feed, cottonseed meal, corn gluten feed, soybean oil meal, wheat bran, wheat standard middlings, oat mill feed, salt, iodized limestone, bone meal, molasses.
Quaker Oats Co.	F.	21.36	3.66	57.55	8.75	8.68	9.62	
Chicago, Ill.								
Quaker 24% Dairy Ration . .	G.	24.00	3.50	52.00	-	-	12.00	Hominy feed, yellow hominy feed, barley feed, cottonseed meal, corn gluten feed, soybean oil meal, wheat bran, wheat standard middlings, oat mill feed, salt, iodized limestone, bone meal, molasses.
Quaker Oats Co.	F.	24.12	3.26	54.92	8.39	9.31	10.71	
Chicago, Ill.								
Rollins Special Open Formula	G.	20.00	4.00	45.00	-	-	9.00	Corn gluten feed, wheat bran, cottonseed meal, wheat middlings, hominy, brewers' dried grains, linseed meal, molasses, limestone, bone meal, salt.
H. E. Rollins	F.	21.41	3.38	58.53	6.50	10.18	7.55	
New Durham, N. H.								
Champlain Valley 20 Dairy Ration	G.	20.00	3.50	56.00	-	-	8.50	Linseed meal, soybean oil meal, cottonseed meal, brewers' dried grains, corn gluten meal, corn gluten feed, corn meal, hominy feed, oats, barley, wheat bran, wheat middlings, cane molasses, calcium carbonate, salt.
St. Albans Grain Co.	F.	22.28	5.25	53.60	9.03	9.84	8.09	
St. Albans, Vt.								

Hygrade 16 Milk Ration Sweetened . . . . . St. Albans Grain Co. . . . . St. Albans, Vt.	G.	16.00	3.50	60.00	-	-	8.50	Linseed meal, soybean oil meal, brewers' dried grains, corn gluten feed, hominy feed, oats, barley, wheat bran, wheat middlings, cane molasses, calcium carbonate, salt.
	F.	17.60	4.02	59.41	8.32	10.65	6.72	
Hygrade 20 Milk Ration Sweetened . . . . . St. Albans Grain Co. . . . . St. Albans, Vt.	G.	20.00	3.50	54.00	-	-	8.50	Linseed meal, soybean oil meal, cottonseed meal, brewers' dried grains, corn gluten meal, corn gluten feed, corn meal, hominy feed, oats, barley, wheat bran, wheat middlings, cane molasses, calcium carbonate, salt.
	F.	22.98	4.34	55.65	6.85	10.18	7.59	
Hygrade 24 Milk Ration Sweetened . . . . . St. Albans Grain Co. . . . . St. Albans, Vt.	G.	24.00	3.50	50.00	-	-	9.00	Corn gluten meal, corn gluten feed, linseed meal, soybean oil meal, cottonseed meal, brewers' dried grains, corn meal, hominy feed, oats, barley, wheat bran, wheat middlings, calcium carbonate, salt, cane molasses.
	F.	25.35	4.33	52.31	8.69	9.32	6.76	
Utility 20 Dairy Ration . . . St. Albans Grain Co. . . . . St. Albans, Vt.	G.	20.00	3.50	55.00	-	-	12.00	Linseed meal, soybean oil meal, corn gluten feed, cottonseed meal, corn meal, hominy feed, oats, barley, brewers' dried grains, oat meal mill by-products, wheat bran, wheat middlings, calcium carbonate, cane molasses, salt.
	F.	21.89	3.27	56.68	9.04	9.12	10.74	

Brand and Manufacturer		Pounds in 100 lbs. of Feeding Stuffs						Certified by Manufacturer to Contain
		Protein	Fat	Carbo-hydrates	Ash	Moisture	Crude Fiber	
Wirthmore Supplement Dairy 32 St. Albans Grain Co. . . . . St. Albans, Vt.	G. F.	32.00 31.15	4.00 4.65	45.00 44.61	- 10.45	- 9.14	8.00 7.39	Corn gluten meal, corn gluten feed, soybean oil meal, linseed meal, cottonseed meal, wheat bran, wheat middlings, cane molasses, calcium carbonate, bone meal, salt.
Wirthmore 20 Sweetened Dairy Feed	G.	20.00	4.50	59.00	-	-	8.00	Corn gluten meal, distillers' corn dried grains, linseed meal, soybean oil meal, cottonseed meal, corn gluten feed, yellow corn meal, oats, barley, wheat middlings, wheat bran, bone meal, cane molasses, salt.
St. Albans Grain Co. . . . . St. Albans, Vt.	F.	21.10	4.80	58.44	5.04	10.62	7.05	
Wirthmore 25 Sweetened Balanced Ration	G.	25.00	4.50	55.00	-	-	8.50	Corn gluten meal, distillers' corn dried grains, linseed meal, soybean oil meal, barley, oats, cottonseed meal, corn gluten feed, yellow corn meal, wheat middlings, wheat bran, bone meal, cane molasses, salt.
St. Albans Grain Co. . . . . St. Albans, Vt.	F.	23.73	4.56	55.45	6.36	9.90	7.13	
Spaulding's Dairy Feed . . .	G.	20.00	4.00	50.00	-	-	10.00	Linseed meal, cottonseed meal, corn gluten feed, corn meal, hominy feed, rye distillers' dried grains, brewers' dried grains, wheat bran or wheat middlings, mill run wheat screenings, salt, calcium carbonate, molasses.
F. B. Spaulding Co. . . . . . Lancaster, N. H.	F.	20.44	4.41	58.93	6.62	9.60	7.93	

Strafford County Dairy Feed .	G.	18.00	5.00	50.00	-	-	9.00	Wheat bran, corn meal, oats, linseed meal, corn gluten feed, cottonseed meal, salt, bone meal, molasses.
Strafford County Grain Mill .	F.	21.58	3.35	54.69	10.45	9.93	9.00	
Rochester, N. H.								
Stratton's White Clover 20% Dairy Feed	G.	20.00	4.00	50.00	-	-	11.00	Wheat bran, linseed meal, oat mill feed, corn gluten feed, barley, cottonseed meal, wheat screenings, molasses, calcium carbonate, salt.
Stratton & Co.	F.	20.70	3.31	58.02	9.34	8.63	13.43	
Concord, N. H.								
Eventually Gold Medal Dairy Ration	G.	20.00	4.50	60.00	-	-	8.50	Wheat bran, wheat standard middlings, oats, yellow corn meal, corn gluten feed, cottonseed meal, linseed meal, limestone, salt.
Washburn Crosby Co.	F.	21.67	4.52	56.50	8.10	9.21	8.41	
Minneapolis, Minn.								
Blue Seal "16" Dairy Ration .	G.	16.00	4.50	60.00	-	-	9.00	Oats, linseed meal, soybean oil meal, barley, wheat bran, hominy feed, cane molasses, B.S.mineral mixture.
H. K. Webster Co.	F.	18.08	4.88	59.53	6.32	11.19	7.22	
Lawrence, Mass.								
Blue Seal "20" Dairy Ration .	G.	20.00	4.00	54.00	-	-	9.00	Linseed meal, soybean oil meal, oats, malt sprouts, corn oil meal, corn gluten feed, cottonseed meal, hominy feed, wheat bran, distillers' corn dried grains, cane molasses, B.S. mineral mixture, brewers' dried grains.
H. K. Webster Co.	F.	22.98	4.72	55.24	6.44	10.62	7.32	
Lawrence, Mass.								
Blue Seal Fitting Ration . .	G.	13.00	4.50	64.00	-	-	7.00	Oats, linseed meal, soybean oil meal, yellow corn meal, corn oil meal, barley, wheat bran, hominy feed, cane molasses, B.S.mineral mixture, pure cod liver oil.
H. K. Webster Co.	F.	15.19	4.60	62.90	5.77	11.54	5.87	
Lawrence, Mass.								

Brand and Manufacturer	Pounds in 100 lbs. of Feeding Stuffs						Certified by Manufacturer to Contain
	Protein	Fat	Carbo-hydrates	Ash	Moisture	Crude Fiber	
Blue Seal Special 20% Dairy Ration	G. 20.00	4.50	55.00	-	-	10.00	Cottonseed meal, soybean oil meal, malt sprouts, corn gluten feed, oat mill feed, wheat bran, hominy feed, peanut skins, germs and meal, linseed meal, brewers' dried grains, distillers' corn dried grains, cane molasses, B.S.mineral mixture.
H. K. Webster Co.	F. 25.00	4.10	53.92	7.30	9.68	11.74	
Lawrence, Mass.							
DISTILLERS' CORN DRIED GRAINS							
Corn Distillers' Dried Grains	G. 28.00	8.00	45.00	-	-	15.00	
Allied Mills	F. 28.89	4.42	56.77	2.60	7.32	-	
Chicago, Ill.							
Corn Distillers' Dried Grains	G. 28.00	7.00	45.00	-	-	15.00	
Continental Distilling Corp.	F. 28.00	8.13	53.88	1.52	8.47	-	
Philadelphia, Pa.							
Neumond 28% Corn Distillers' Grain	G. 28.00	7.00	45.00	-	-	15.00	
Neumond Co.	F. 31.74	9.21	50.65	2.19	6.21	-	
St. Louis, Mo.							
DISTILLERS' RYE DRIED GRAINS							
Distillers' Dried Grains . .	G. 20.00	5.00	51.00	-	-	16.00	Distillers' rye dried grains.
Ferneau Grain Co.	F. 17.34	5.05	67.15	2.83	7.63	13.94	
Blanchester, Ohio							

DOG FEED								
Gaines Meat and Milk Meal Gaines Food Co. . . . . . Sherburne, N. Y.	G. F.	23.00 31.79	3.00 5.09	50.00 41.66	- 14.20	- 7.26	4.00 3.94	Beef, skimmed milk, egg yolk, beets, soy beans, wheat, yellow corn, rice, malt syrup, bone meal, calcium carbonate, cod liver oil.
FISH MEAL								
Maine Vitamin D. Fish Meal Maine Fish Meal Co. . . . . Portland, Me.	G. F.	55.00 54.64	12.00 15.72	- -	- 18.51	- 9.56	1.00 -	
Register Brand Cod and Haddock Fish Meal	G.	60.00	3.00	-	-	-	1.00	
John Reardon & Sons Co. . . Cambridge, Mass.	F.	64.13	6.12	-	20.56	7.44	-	
GLUTEN FEED								
Cream of Corn Gluten Feed .	G.	25.00	2.00	58.50	-	-	8.50	
American Maize Products Co. New York, N. Y.	F.	28.63	2.36	54.80	6.47	7.74	-	
Clinton Corn Gluten Feed . .	G.	25.00	2.00	57.00	-	-	8.50	
Clinton Co.	F.	28.94	3.02	52.27	7.61	8.16	-	
Clinton, Iowa								
Buffalo Corn Gluten Feed . .	G.	25.00	2.00	50.00	-	-	8.50	
Corn Products Refining Co. .	F.	26.44	2.20	54.72	7.18	9.46	-	
New York, N. Y.								
Sweetened Douglas Corn Gluten Feed	G.	20.00	1.00	60.00	-	-	7.00	Corn gluten feed, cane molasses.
Penick & Ford	F.	20.00	1.97	60.80	7.28	9.95	-	
Cedar Rapids, Iowa								
Staley's Corn Gluten Feed . .	G.	25.00	1.00	53.00	-	-	8.00	
A. E. Staley Mfg. Co. . . .	F.	31.76	2.16	51.09	6.80	8.19	-	
Decatur, Ill.								

Brand and Manufacturer		Pounds in 100 lbs. of Feeding Stuffs						Certified by Manufacturer to Contain
		Protein	Fat	Carbo-hydrates	Ash	Moisture	Crude Fiber	
Union Corn Gluten Feed	G.	25.00	1.00	50.00	-	-	8.00	
Union Starch & Refining Co. Columbus, Ind.	F.	25.96	1.95	56.59	4.93	10.57	-	
GLUTEN MEAL								
Amaizo Gluten Meal	G.	40.00	1.00	49.00	-	-	4.00	
American Maize Products Co. Chicago, Ill.	F.	49.91	1.31	37.38	1.96	9.44	-	
HOMINY FEED								
Emco Hominy Feed	G.	10.00	6.00	61.00	-	-	6.00	
Evans Milling Co. Indianapolis, Ind.	F.	11.33	7.10	69.11	2.96	9.50	-	
Hominy Feed	G.	10.00	6.00	66.00	-	-	5.00	
Illinois Cereal Mills Paris, Ill.	F.	12.87	7.46	66.76	3.37	9.54	-	
O-Corn-O Hominy Feed	G.	10.00	7.00	65.00	-	-	4.00	
Kellogg Co. of Canada London, Ont.	F.	9.22	6.69	72.28	2.16	9.65	-	
KELP								
Kelco Meal	G.	3.00	0.10	-	30.00	-	10.00	
Kelco Co. New York, N. Y.	F.	5.47	0.29	-	34.40	11.66	-	
LINSEED MEAL								
Triple Value Old Process Linseed Meal	G.	37.00	4.50	41.00	-	-	9.00	
Archer-Daniels Midland Co. Minneapolis, Minn.	F.	36.25	5.49	42.02	5.75	10.49	-	

Maple Leaf Linseed Oil Cake Meal 34%	G.	34.00	5.00	34.00	-	-	9.00
Canada Linseed Oil Mills Montreal, Canada	F.	35.64	5.79	42.96	5.54	10.07	-
Maple Leaf 38% Linseed Oil Cake Meal	G.	38.00	5.00	34.00	-	-	9.00
Canada Linseed Oil Mills Montreal, Canada	F.	39.49	5.70	39.43	4.97	10.41	-
K & M Brand 32% Old Process Linseed Meal	G.	32.00	5.00	40.00	-	-	10.00
Kelloggs & Miller . . . . . Amsterdam, N. Y.	F.	33.10	5.51	46.02	6.89	8.48	-
Screwpress Linseed Oil Cake Meal	G.	35.00	6.50	37.00	-	-	8.00
Sherwin-Williams Co. . . . Montreal, Canada	F.	33.86	8.02	45.53	6.38	6.21	-
Sherwin-Williams Pure Old Process 32% Linseed Meal . .	G.	32.00	4.50	45.00	-	-	9.00
Sherwin-Williams Co. . . . . Cleveland, Ohio	F.	37.74	5.70	42.29	5.54	8.73	-
MEAT SCRAPS							
Corenco 50% Meat and Bone Scrap	G.	50.00	6.00	-	-	-	-
Consolidated Rendering Co. Boston, Mass.	F.	50.87	8.09	-	30.79	7.12	-
Corenco 55% Meat Scraps . .	G.	55.00	6.00	-	-	-	-
Consolidated Rendering Co. . Boston, Mass.	F.	58.84	9.89	-	23.99	6.61	-
Morse's 45% Meat Scraps . . .	G.	45.00	8.00	-	-	-	-
James F. Morse & Co. . . . . Somerville, Mass.	F.	43.82	10.14	-	38.44	6.84	-

Brand and Manufacturer		Pounds in 100 lbs. of Feeding Stuffs						Certified by Manufacturer to Contain
		Protein	Fat	Carbo-hydrates	Ash	Moisture	Crude Fiber	
Boston Bull Meat Scraps . . .	G.	45.00	8.00	-	-	-	-	
New England Rendering Co. . . Brighton, Mass.	F.	48.69	10.87	-	28.50	6.77	-	
Register Brand 45% Meat and Bone Scrap	G.	45.00	6.00	-	-	-	-	
John Reardon & Sons Co. . . . Cambridge, Mass.	F.	45.92	11.56	-	35.52	4.60	-	
Register Brand 50% Meat and Bone Scrap	G.	50.00	6.00	-	-	-	-	
John Reardon & Sons . . . . . Cambridge, Mass.	F.	47.89	9.59	-	33.31	7.15	-	
MILK, DRIED SKIMMED								
Dairylea Dried Skim Milk . .	G.	33.00	0.50	-	-	-	-	
Dairymen's League Cooperative Association . . . . . Utica, N. Y.	F.	35.59	0.71	50.74	8.20	4.76	-	
Ward's Pure Dried Skim Milk	G.	32.00	1.00	40.00	-	-	-	
Ward Dry Milk Co. . . . . St. Paul, Minn.	F.	36.25	1.00	49.67	8.26	4.82	-	
OAT HULLS								
OH-Boy Reground Oat Hulls . .	G.	5.00	1.50	78.00	-	-	30.00	Oat shorts, oat hulls.
Reedy-Patrick Co. . . . . Kansas City, Mo.	F.	8.14	2.23	76.03	6.25	7.35	-	

OAT MEAL								
Red 3 Feeding Oat Meal	G.	14.50	5.00	60.00	-	-	3.70	
National Oats Co.	F.	16.42	5.89	67.36	2.50	7.83	-	
East St. Louis, Ill.								
Feeding Oat Meal	G.	15.00	5.00	65.75	-	-	3.75	
New Richmond Roller Mills Co.	F.	16.65	5.29	65.32	2.20	10.54	2.78	
New Richmond, Wisc.								
North East Quality Feeding Oat Meal	G.	15.00	4.00	60.00	-	-	3.75	
North East Feed Mill Co. . .	F.	15.98	3.78	67.73	2.35	10.16	-	
Minneapolis, Minn.								
POULTRY FEED								
Empire Egg Mash	G.	16.50	3.50	57.00	-	-	7.00	Dried buttermilk, dried skimmed milk, meat scraps, fish meal, soybean oil meal, alfalfa meal, wheat bran, wheat standard middlings, corn gluten feed, corn meal, oats, limestone, salt, sardine oil.
Allied Mills	F.	18.69	5.76	58.44	7.63	9.48	6.64	
Chicago, Ill.								
Wayne Broiler Ration	G.	18.00	3.50	53.00	-	-	8.00	Dried buttermilk, dried skimmed milk, liver meal, meat scraps, fish meal, yellow corn meal, oats, wheat standard middlings, wheat bran, soybean oil meal, alfalfa meal, limestone, iron oxide, potassium iodide, salt, sardine oil.
Allied Mills	F.	19.39	5.49	56.68	7.79	10.65	6.09	
Chicago, Ill.								

Brand and Manufacturer		Pounds in 100 lbs. of Feeding Stuffs						Certified by Manufacturer to Contain
		Protein	Fat	Carbo-hydrates	Ash	Moisture	Crude Fiber	
Wayne Chick Starter	G.	17.00	4.00	56.00	-	-	6.00	Dried buttermilk, dried skimmed milk, meat scraps, fish meal, wheat standard middlings, corn meal, oat meal, oats, alfalfa meal, soybean oil meal, wheat bran, limestone, iron oxide, potassium iodide, salt, sardine oil.
Allied Mills, Chicago, Ill.	F.	20.31	5.42	57.80	7.62	8.85	5.33	
Wayne Egg and Breeder Mash	G.	18.00	3.50	52.00	-	-	7.00	Dried buttermilk, dried skimmed milk, meat scraps, fish meal, wheat standard middlings, wheat bran, corn meal, oat meal, corn gluten feed, alfalfa meal, soybean oil meal, oats, limestone, iron oxide, potassium iodide, salt, sardine oil.
Allied Mills, Chicago, Ill.	F.	20.92	5.80	54.06	9.71	9.51	7.60	
Wayne Growing Mash	G.	16.00	4.00	56.00	-	-	6.00	Dried buttermilk, dried skimmed milk, meat scraps, fish meal, wheat standard middlings, corn meal, oat meal, oats, alfalfa meal, soybean oil meal, wheat bran, limestone, iron oxide, potassium iodide, salt, sardine oil.
Allied Mills, Chicago, Ill.	F.	18.83	5.62	58.80	7.39	9.36	6.17	

Wayne Mash Concentrate . . .	G.	32.00	4.00	33.00	-	-	8.00	Dried buttermilk, dried skimmed milk, fish meal, peanut oil meal, meat scraps, soybean oil meal, corn gluten meal, corn gluten feed, alfalfa meal, limestone, iron oxide, potassium iodide, salt, sardine oil.
Allied Mills	F.	40.41	7.28	25.73	19.25	7.33	6.31	
Chicago, Ill.								
Wayne Starter and Grower . .	G.	16.00	3.50	56.00	-	-	6.00	Corn meal, oats, soybean oil meal, fish meal, meat scraps, wheat standard middlings, wheat bran, alfalfa meal, dried skimmed milk, dried buttermilk, limestone, iron oxide, potassium iodide, salt, sardine oil.
Allied Mills	F.	17.43	5.20	60.37	6.48	10.52	6.51	
Chicago, Ill								
Wayne Turkey Growing Mash .	G.	18.00	3.50	58.00	-	-	8.00	Dried buttermilk, dried skimmed milk, meat scraps, fish meal, wheat standard middlings, corn meal, oats, alfalfa meal, soybean oil meal, corn gluten meal, wheat bran, charcoal, limestone, iron oxide, potassium iodide, salt, sardine oil.
Allied Mills	F.	20.40	6.21	54.99	8.83	9.57	7.53	
Chicago, Ill.								
Arcady Wonder Laying Mash . .	G.	20.00	4.00	57.00	-	-	7.00	Fish meal, meat scraps, animal liver meal, soybean oil meal, dried buttermilk, linseed meal, oat meal, corn meal, corn gluten feed, alfalfa meal, oats, wheat bran, wheat middlings, cod liver oil, bone meal, calcium carbonate, salt, potassium iodide.
Arcady Farms Milling Co. . .	F.	20.14	4.47	55.09	10.81	9.49	6.34	
Chicago, Ill.								

Brand and Manufacturer		Pounds in 100 lbs. of Feeding Stuffs						Certified by Manufacturer to Contain
		Protein	Fat	Carbo-hydrates	Ash	Moisture	Crude Fiber	
Pennant Brand Chick Starter .	G.	17.00	5.00	50.00	-	-	5.00	Wheat bran, yellow corn meal, wheat red dog, oat groats, dried skimmed milk, beef scraps, charcoal, bone meal, alfalfa leaf meal, salt, cod liver oil.
E. W. Bailey & Co. . . . . Montpelier, Vt.	F.	17.00	4.30	59.48	8.69	10.53	4.39	
Pennant Brand Growing Feed . .	G.	15.00	5.00	50.00	-	-	5.00	Wheat bran, yellow corn meal, wheat red dog, oat groats, dried skimmed milk, beef scraps, charcoal, bone meal, alfalfa leaf meal, calcium carbonate, salt, cod liver oil.
E. W. Bailey & Co. . . . . Montpelier, Vt.	F.	17.73	5.00	56.46	9.84	10.97	5.05	
Pennant Brand Laying Mash . .	G.	20.00	5.00	50.00	-	-	6.00	Hominy feed, yellow corn meal, wheat red dog, gluten feed, oat groats, wheat bran, beef scraps, dried skimmed milk, alfalfa leaf meal, salt.
E. W. Bailey & Co. . . . . Montpelier, Vt.	F.	22.28	4.54	51.59	11.41	10.18	4.86	
Barco Complete Laying Mash . .	G.	16.00	4.00	68.00	-	-	8.00	Corn meal, wheat meal, wheat bran, oat meal, beef scraps, skimmed milk, alfalfa leaf meal, cod liver oil, fish meal, oat groats, calcium carbonate, salt.
G. N. Bartemus Co. . . . . Concord, N. H.	F.	18.04	4.59	60.40	6.51	10.46	4.24	
Barco Special Broiler Mash . .	G.	17.00	4.00	47.00	-	-	5.00	Corn meal, wheat bran, oat groats, skimmed milk, beef scraps, fish meal, alfalfa leaf meal, bone meal, lime flour, salt, cod liver oil.
G. N. Bartemus Co. . . . . Concord, N. H.	F.	19.57	5.28	56.41	8.76	9.98	4.15	

Barco Special Chick Starter .	G.	14.00	4.00	40.00	-	-	4.00	Wheat bran, corn meal, wheat red dog, wheat middlings, oat groats, skimmed milk, beef scraps, charcoal, bone meal, alfalfa leaf meal, cod liver meal, salt, cod liver oil.
G. N. Bartemus Co.	F.	18.56	5.41	56.45	9.67	9.91	5.65	
Concord, N. H.								
Barco Special Growing Feed .	G.	14.00	5.00	40.00	-	-	5.00	Wheat bran, corn meal, wheat red dog, oat groats, skimmed milk, beef scraps, charcoal, bone meal, alfalfa leaf meal, salt, cod liver oil.
G. N. Bartemus Co.	F.	18.91	4.87	56.50	9.75	9.97	5.15	
Concord, N. H.								
Barco Special Mash	G.	20.00	5.00	50.00	-	-	6.00	Hominy feed, corn gluten feed, wheat middlings, oats, wheat bran, beef scraps, skimmed milk, alfalfa leaf meal, salt.
G. N. Bartemus Co.	F.	23.47	5.08	52.95	10.21	8.29	6.22	
Concord, N. H.								
Concord Mash	G.	20.00	4.00	47.00	-	-	8.00	Wheat bran, corn gluten feed, alfalfa leaf meal, oats, beef scraps, wheat red dog, skimmed milk, hominy, salt.
G. N. Bartemus Co.	F.	20.88	4.61	56.38	8.70	9.43	5.99	
Concord, N. H.								
Beacon Breeders' Mash	G.	20.00	4.00	50.00	-	-	7.00	Dried buttermilk, dried skimmed milk, meat scraps, fish meal, alfalfa leaf meal, corn meal, oats, barley, wheat bran, wheat middlings, mill run screenings, anti-rachitic oil, salt, calcium carbonate.
Beacon Milling Co.	F.	21.89	6.80	51.12	11.52	8.67	6.62	
Cayuga, N. Y.								
Beacon Cayuga Laying Mash . .	G.	20.00	4.00	50.00	-	-	7.00	Dried buttermilk, dried skimmed milk, fish meal, meat scraps, corn meal, alfalfa leaf meal, wheat bran, wheat middlings, mill run screenings, barley, oats, anti-rachitic oil, calcium carbonate, salt.
Beacon Milling Co.	F.	21.49	5.82	52.85	10.55	9.29	6.53	
Cayuga, N. Y.								

Brand and Manufacturer		Pounds in 100 lbs. of Feeding Stuffs						Certified by Manufacturer to Contain
		Protein	Fat	Carbo-hydrates	Ash	Moisture	Crude Fiber	
Beacon Egg Mass	G.	22.00	4.50	48.00	-	-	7.00	Dried buttermilk, dried skimmed milk, meat scraps, fish meal, barley, oats, corn meal, alfalfa leaf meal, wheat bran, wheat middlings, mill run screenings, anti-rachitic oil, calcium carbonate, salt.
Beacon Milling Co. Cayuga, N. Y.	F.	23.77	6.72	49.13	11.79	8.59	6.56	
Chase Growing Mash	G.	15.00	5.00	50.00	-	-	9.00	Corn meal, oat meal, wheat bran, wheat middlings, meat scraps, bone meal, charcoal, salt, buttermilk.
David C. Chase Smithtown, N. H.	F.	16.64	5.55	57.80	11.24	8.77	7.44	
Chase Laying Mash	G.	19.00	5.00	48.00	-	-	8.00	Corn meal, oat meal, wheat bran, wheat middlings, meat scraps, corn gluten feed, dried milk, salt, charcoal.
David C. Chase Smithtown, N. H.	F.	20.66	5.69	53.82	11.10	8.73	7.45	
Garland Laying Mash	G.	18.00	3.00	55.00	-	-	7.00	Alfalfa leaf meal, soybean oil meal, fish meal, meat scraps, dried buttermilk, cod liver oil, linseed meal, wheat bran, wheat middlings, oats, wheat, corn meal, calcium carbonate, salt.
E. A. Cowee Co. Fitchburg, Mass.	F.	20.71	4.54	53.78	10.11	10.86	5.23	
Royal Laying Mash	G.	18.00	3.00	50.00	-	-	8.00	Alfalfa meal, corn meal, oats, wheat, dried buttermilk, wheat bran, wheat middlings, cod liver oil, fish meal, meat scraps, linseed meal, soybean oil meal, calcium carbonate, salt.
E. A. Cowee Co. Fitchburg, Mass.	F.	20.14	5.42	54.95	9.47	10.02	6.65	

Utility Laying Ration	G.	18.00	4.00	50.00	-	-	7.00	Dried skimmed milk, meat scraps, fish meal, alfalfa meal, corn gluten meal, corn gluten feed, cod liver oil, oats, barley, wheat, yellow corn meal, wheat bran, wheat middlings, calcium carbonate, salt.
Charles M. Cox Co.	F.	21.62	4.98	52.24	11.00	10.16	6.37	
Boston, Mass.								
D & F Scratch Feed	G.	10.00	2.00	70.00	-	-	5.00	Cracked corn, wheat, barley.
D & F Grain Co.	F.	10.85	2.24	75.35	1.01	10.55	2.38	
Pittsfield, N. H.								
Maine Laying Mash	G.	18.00	4.00	53.00	-	-	9.00	Yellow corn meal, wheat bran, wheat red dog, oats, fish meal, alfalfa leaf meal, calcite flour.
D & F Grain Co.	F.	20.62	6.30	55.74	7.76	9.58	5.68	
Pittsfield, N. H.								
Delaware All Mash Chick Starter	G.	17.00	5.00	60.00	-	-	6.00	Cod liver oil, dried skimmed milk, meat scraps, fish meal, wheat red dog, alfalfa leaf meal, corn meal, wheat bran, wheat middlings, oat meal, bone meal, phosphatic calcium carbonate, charcoal, salt.
Delaware Mills	F.	18.25	5.89	57.36	8.67	9.83	6.33	
Deposit, N. Y.								
Delaware Growing Mash	G.	17.00	5.00	55.00	-	-	6.50	Cod liver oil, dried skimmed milk, alfalfa leaf meal, meat scraps, fish meal, bone meal, soybean oil meal, corn meal, wheat bran, wheat middlings, wheat flour middlings, oat meal, phosphatic calcium carbonate, salt.
Delaware Mills	F.	18.47	4.89	58.67	7.79	10.18	5.01	
Deposit, N. Y.								

Brand and Manufacturer		Pounds in 100 lbs. of Feeding Stuffs						Certified by Manufacturer to Contain
		Protein	Fat	Carbo-hydrates	Ash	Moisture	Crude Fiber	
Delaware Laying Mash	G.	20.00	5.00	50.00	-	-	7.00	Cod liver oil, dried skimmed milk, meat scraps, bone meal, fish meal, soybean oil meal, corn gluten feed, corn meal, wheat bran, wheat middlings, wheat red dog, oat meal, barley, alfalfa leaf meal, phosphatic calcium carbonate, salt.
Delaware Mills	F.	20.22	5.00	54.64	9.97	10.17	4.86	
Deposit, N. Y.								
Delaware Special Laying Mash	G.	18.00	4.50	55.00	-	-	8.00	Cod liver oil, dried skimmed milk, meat scraps, fish meal, bone meal, soybean oil meal, corn gluten feed, alfalfa meal, wheat bran, wheat middlings, corn meal, barley, oats, phosphatic calcium carbonate, salt.
Delaware Mills	F.	20.01	4.59	58.59	6.70	10.11	6.09	
Deposit, N. Y.								
Delaware Starter and Broiler Ration	G.	18.00	4.50	55.00	-	-	6.00	Cod liver oil, dried skimmed milk, meat scraps, fish meal, bone meal, alfalfa leaf meal, corn meal, wheat bran, wheat middlings, wheat red dog, oat meal, soybean oil meal, phosphatic calcium carbonate, salt.
Delaware Mills	F.	18.04	4.77	60.37	6.74	10.08	5.15	
Deposit, N. Y.								

Delco Laying Mash	G.	17.00	4.00	50.00	-	-	9.00	Cod liver oil, dried skimmed milk, meat scraps, bone meal, soybean oil meal, corn gluten meal, corn gluten feed, wheat bran, wheat middlings, corn meal or hominy feed, oats, alfalfa meal, phosphatic calcium carbonate, salt.
Delaware Mills	F.	18.21	4.22	59.48	8.35	9.74	7.14	
Deposit, N. Y.								
All purpose Complete Ration								
Starter-Grower-Layer	G.	15.00	4.50	56.00	-	-	6.00	Yellow corn, wheat, oats, wheat flour middlings, wheat bran, alfalfa leaf meal, dried buttermilk, meat scraps, fish meal, soybean oil meal, steamed bone meal, calcium carbonate, salt, cod liver oil, potassium iodide.
Dietrich & Gambrill	F.	20.66	4.95	56.18	7.42	10.79	4.19	
Frederick, Md.								
Canton Laying Mash	G.	20.00	4.00	52.00	-	-	8.00	Wheat middlings, wheat bran, oats, corn meal, barley, soybean oil meal, corn gluten feed, alfalfa meal, meat scraps, fish meal, calcium carbonate, bone meal, salt, potassium iodide, cod liver oil.
Dietrich & Gambrill	F.	22.28	4.84	56.38	7.33	9.17	6.66	
Frederick, Md.								
D & G Breeder Mash	G.	19.00	5.00	53.00	-	-	9.00	Wheat bran, wheat middlings, yellow corn meal, oats, alfalfa leaf meal, fish meal, meat scraps, dried buttermilk, cod liver oil, soybean oil meal, malt flour, bone meal, calcium carbonate, salt, potassium iodide.
Dietrich & Gambrill	F.	22.59	6.69	51.90	9.02	9.80	6.45	
Frederick, Md.								

Brand and Manufacturer	Pounds in 100 lbs. of Feeding Stuffs						Certified by Manufacturer to Contain
	Protein	Fat	Carbo-hydrates	Ash	Moisture	Crude Fiber	
Frederick Growing Mash . . .	G. 16.00	4.00	60.00	-	-	8.00	Wheat middlings, wheat bran, oats, corn feed meal, corn gluten feed, barley, soybean oil meal, meat scraps, dried buttermilk, alfalfa leaf meal, bone meal, calcium carbonate, salt, potassium iodide.
Dietrich & Gambrill	F. 18.87	5.40	56.98	9.37	9.38	6.03	
Frederick, Md.							
Frederick Laying Mash	G. 18.00	4.00	53.00	-	-	8.00	Wheat bran, wheat middlings, corn feed meal, oats, barley, corn gluten meal, meat scraps, fish meal, alfalfa meal, soybean oil meal, bone meal, calcium carbonate, salt, dried buttermilk, potassium iodide, cod liver oil.
Dietrich & Gambrill	F. 20.44	5.19	55.95	8.34	10.08	6.00	
Frederick, Md.							
Gambrill's Chick Starter . .	G. 16.00	4.00	59.00	-	-	4.50	Oat meal, corn meal, malt flour, alfalfa leaf meal, wheat flour middlings, soybean oil meal, fish meal, meat scraps, dried buttermilk, cod liver oil, bone meal, calcium carbonate, salt, potassium iodide.
Dietrich & Gambrill	F. 19.92	5.07	56.07	8.85	10.09	3.67	
Frederick, Md.							

Gambrill's Laying Mash . . .	G.	20.00	5.00	51.00	-	-	7.00	Wheat bran, wheat middlings, corn feed meal, linseed meal, soybean oil meal, oats, alfalfa leaf meal, corn gluten meal, malt flour, meat scraps, fish meal, dried buttermilk, bone meal, calcium carbonate, salt, cod liver oil, potassium iodide.
Dietrich & Gambrill	F.	22.29	5.39	53.56	8.92	9.84	5.69	
Frederick, Md.								
Eastern States All Mash Developer	G.	14.50	3.50	58.00	-	-	7.00	Yellow corn meal, wheat bran, mill run wheat screenings, wheat flour middlings, oats, barley, alfalfa leaf meal, soybean oil meal, dried skimmed milk, meat scraps, fish meal, oyster shell meal, dicalcium phosphate, sardine oil, salt.
Eastern States Farmers' Exchange	F.	16.37	5.27	61.14	7.61	9.61	5.34	
Springfield, Mass.								
Eastern States Combination Mash	G.	15.00	4.00	57.00	-	-	6.50	Yellow corn meal, wheat bran, mill run wheat screenings, wheat flour middlings, oats, dried skimmed milk, alfalfa leaf meal, meat scraps, fish meal, oyster shell meal, sardine oil, dicalcium phosphate, salt.
Eastern States Farmers' Exchange	F.	17.03	5.53	58.64	8.17	10.63	4.92	
Springfield, Mass.								

Brand and Manufacturer	Pounds in 100 lbs. of Feeding Stuffs						Certified by Manufacturer to Contain
	Protein	Fat	Carbo-hydrates	Ash	Moisture	Crude Fiber	
Eastern States Developer . .	G. 18.50	4.00	52.00	-	-	6.50	Yellow corn meal, wheat bran, mill run wheat screenings, wheat flour middlings, barley, oats, soybean oil meal, alfalfa leaf meal, fish meal, meat scraps, dried skimmed milk, dried whey, oyster shell meal, sardine oil, salt, dicalcium phosphate.
Eastern States Farmers' Exchange . . . . . Springfield, Mass.	F. 19.87	5.30	56.56	9.27	9.00	6.11	
Eastern States Egg Mash . .	G. 20.00	4.00	49.00	-	-	6.50	Wheat standard middlings, yellow corn meal, wheat bran, mill run wheat screenings, barley, fish meal, meat scraps, soybean oil meal, oats, alfalfa leaf meal, corn gluten meal, oyster shell meal, sardine oil, salt.
Eastern States Farmers' Exchange . . . . . Springfield, Mass.	F. 21.19	6.28	52.27	10.27	9.99	5.71	
Eastern States Flushing Mash	G. 18.50	3.50	55.00	-	-	4.50	Dried whey, yellow corn meal, wheat bran, mill run wheat screenings, wheat flour middlings, soybean oil meal, alfalfa leaf meal, fish meal, meat scraps, sardine oil.
Eastern States Farmers' Exchange . . . . . Springfield, Mass.	F. 19.96	4.56	59.03	7.63	8.82	4.50	

Eastern States Producer 20 .	G.	20.00	4.00	49.00	-	-	6.00	Yellow corn meal, wheat bran, mill run wheat screenings, wheat flour middlings, meat scraps, oats, alfalfa leaf meal, dried skimmed milk, fish meal, soybean oil meal, oyster shell meal, sardine oil, dicalcium phosphate, salt.
Eastern States Farmers' Exchange . . . . . Springfield, Mass.	F.	21.01	6.57	52.20	10.73	9.49	4.92	
Eastern States Producer Mash	G.	17.00	4.00	53.00	-	-	6.50	Yellow corn meal, wheat flour middlings, wheat bran, mill run wheat screenings, oats, meat scraps, fish meal, alfalfa leaf meal, dried skimmed milk, oyster shell meal, sardine oil, dicalcium phosphate, salt.
Eastern States Farmers' Exchange . . . . . Springfield, Mass.	F.	17.00	6.27	57.90	9.97	8.86	5.28	
Eastern States Starting and Broiler Ration	G.	18.50	4.00	53.00	-	-	5.00	Yellow corn meal, wheat bran, mill run wheat screenings, wheat flour middlings, oat groats, dried skimmed milk, alfalfa leaf meal, meat scraps, fish meal, oyster shell meal, salt, sardine oil, dicalcium phosphate.
Eastern States Farmers' Exchange . . . . . Springfield, Mass.	F.	20.00	5.31	57.12	7.78	9.79	4.24	

Brand and Manufacturer		Pounds in 100 lbs. of Feeding Stuffs						Certified by Manufacturer to Contain
		Protein	Fat	Carbo-hydrates	Ash	Moisture	Crude Fiber	
Eastern States Turkey Fat	G.	20.00	4.00	51.00	-	-	6.00	Yellow corn meal, wheat bran, mill run wheat screenings, wheat flour middlings, meat scraps, oats, soybean oil meal, alfalfa leaf meal, corn gluten meal, dried skimmed milk, oat groats, oyster shell meal, salt.
Eastern States Farmers' Exchange, Springfield, Mass.	F.	21.49	4.95	53.67	9.84	10.05	4.96	
Countryside Egg Mash	G.	18.00	3.00	50.00	-	-	8.00	Cod liver oil, dried buttermilk, alfalfa leaf meal, corn meal, barley, wheat bran, wheat middlings, fish meal, meat scraps, linseed meal, corn gluten meal, soybean oil meal, calcium carbonate, salt.
Economy Grocery Stores Corp., Boston, Mass.	F.	18.74	4.56	56.90	8.56	11.24	5.29	
Eggtex	G.	17.00	4.00	60.00	-	-	8.00	Alfalfa leaf meal, wheat bran, mill run screenings, wheat middlings, corn meal, fish meal, dried skimmed milk, oats, corn gluten meal, meat and bone meal, cod liver oil, oyster shell flour, salt.
Elmore Milling Co., Oneonta, N. Y.	F.	17.55	4.99	58.68	9.12	9.66	6.77	

Elmore Breeders' Mash . . .	G.	20.00	3.50	55.00	-	-	7.00	Wheat germ meal, yellow corn meal, wheat bran, wheat middlings, oats, alfalfa leaf meal, meat and bone meal, fish meal, dried skimmed milk, cod liver oil, cod liver meal, oyster shell flour, salt.
Elmore Milling Co.	F.	21.54	7.32	51.78	10.39	8.97	5.96	
Oneonta, N.Y.								
Elmore Egg Mash	G.	20.00	4.00	55.00	-	-	8.00	Dried buttermilk, meat scraps, second clear wheat flour, oats, wheat middlings, corn meal or hominy feed, wheat bran, alfalfa leaf meal, calcium carbonate, salt, cod liver oil, fish meal.
Elmore Milling Co.	F.	21.23	7.02	51.91	10.38	9.46	5.71	
Oneonta, N. Y.								
Elmore M.A.C. Laying Mash .	G.	17.00	5.00	60.00	-	-	7.00	Alfalfa leaf meal, wheat bran, corn meal, fish meal, wheat middlings, dried skimmed milk, oats, meat scraps, oyster shell flour, cod liver oil, salt.
Elmore Milling Co.	F.	18.52	6.08	57.58	7.81	10.01	6.27	
Oneonta, N. Y.								
Eshelman Red Rose All Mash Starter	G.	16.00	4.00	55.00	-	-	6.50	Corn meal, wheat bran, wheat middlings, oat meal, meat scraps, fish meal, soybean oil meal, alfalfa leaf meal, dried buttermilk, linseed meal, calcium carbonate, bone meal, salt, cod liver oil.
John W. Eshelman & Sons . .	F.	19.35	4.47	57.89	8.96	9.33	4.36	
Lancaster, Pa.								
Eshelman Red Rose Chick Starter	G.	16.50	4.00	60.00	-	-	6.00	Oat meal, corn meal, wheat bran, wheat middlings, alfalfa leaf meal, dried buttermilk, soybean oil meal, fish meal, linseed meal, bone meal, calcium carbonate, cod liver oil, salt.
John W. Eshelman & Sons . .	F.	19.26	4.53	59.85	6.26	10.10	4.71	
Lancaster, Pa.								

Brand and Manufacturer		Pounds in 100 lbs. of Feeding Stuffs						Certified by Manufacturer to Contain
		Protein	Fat	Carbo-hydrates	Ash	Moisture	Crude Fiber	
Eshelman Red Rose Growing Mash John W. Eshelman & Sons Lancaster, Pa.	G. F.	16.00 19.83	4.00 5.63	55.00 55.04	- 9.96	- 9.54	7.00 5.91	Wheat middlings, corn meal, wheat bran, meat scraps, corn gluten feed, oat meal, soybean oil meal, hominy feed, linseed meal, fish meal, dried buttermilk, alfalfa meal, calcium carbonate, salt, cod liver oil.
Eshelman Red Rose Laying Mash John W. Eshelman & Sons Lancaster, Pa.	G. F.	20.00 22.42	5.00 5.39	50.00 53.55	- 8.54	- 10.10	7.00 5.94	Wheat middlings, corn meal, meat scraps, wheat bran, corn gluten feed, oats, linseed meal, fish meal, soybean oil meal, hominy feed, alfalfa meal, dried buttermilk, dried whey, calcium carbonate, salt, cod liver oil.
C Laying Mash Farm Service Stores Fitchburg, Mass.	G. F.	15.00 20.05	4.00 4.63	55.00 57.45	- 7.90	- 9.97	8.50 5.54	Corn meal, wheat bran, wheat middlings, oats, meat scraps, bone meal, alfalfa meal, salt.
North Star Growing Mash Farm Service Stores Fitchburg, Mass.	G. F.	16.00 20.44	4.00 5.35	45.00 52.85	- 12.05	- 9.31	7.00 5.39	Corn meal, oats, wheat bran, wheat middlings, mill run screenings, corn gluten feed, linseed meal, soybean oil meal, alfalfa meal, bone meal, meat scraps, fish meal, dried skimmed milk, calcium carbonate, salt.

North Star Laying Mash . . .	G.	20.00	5.00	45.00	-	-	7.00	Corn meal, oats, wheat bran, mill run wheat screenings, wheat middlings, corn gluten feed, linseed meal, soybean oil meal, alfalfa meal, meat scraps, fish meal, dried skimmed milk, calcium carbonate, salt, cod liver oil.
Farm Service Stores	F.	22.55	6.07	48.82	13.48	9.08	5.52	
Fitchburg, Mass.								
Henfield Egg Mash	G.	20.00	4.50	50.00	-	-	7.00	Cod liver oil, meat scraps, fish meal, dried buttermilk, alfalfa meal, oats, hominy feed, corn meal, wheat middlings, wheat bran, wheat flour middlings, corn gluten feed, linseed meal, steamed bone meal, calcium carbonate, salt.
First National Stores	F.	22.20	5.53	53.75	9.15	9.37	5.48	
Somerville, Mass.								
Grandin's Chick and Broiler Ration	G.	16.00	4.00	58.00	-	-	6.00	Cod liver oil, dried butter buttermilk, meat and bone scrap, fish meal, soybean oil meal, alfalfa leaf meal, oats, wheat, wheat bran, wheat middlings, barley, hominy feed, yellow corn, calcium carbonate, salt, potassium iodide.
D. H. Grandin Milling Co. . .	F.	17.08	4.48	59.56	8.03	10.85	6.40	
Jamestown, N. Y.								
Grandin's Growing Mash . . .	G.	15.00	4.00	50.00	-	-	8.00	Cod liver oil, dried buttermilk, meat and bone scrap, fish meal, soybean oil meal, corn gluten feed, alfalfa meal, corn meal, corn feed meal, hominy feed, oats, barley, wheat bran, wheat middlings, mill run wheat screenings, calcium carbonate, salt.
D. H. Grandin Milling Co. . .	F.	16.55	5.31	58.04	11.39	8.71	7.04	
Jamestown, N. Y.								

Brand and Manufacturer	Pounds in 100 lbs. of Feeding Stuffs						Certified by Manufacturer to Contain
	Protein	Fat	Carbo-hydrates	Ash	Moisture	Crude Fiber	
Grandin's Laying Mash . . . D. H. Grandin Milling Co. . Jamestown, N. Y.	G. 20.00 F. 20.40	4.00 5.16	50.00 53.80	- 11.55	- 9.09	8.00 6.89	Cod liver oil, dried buttermilk, meat and bone scrap, fish meal, soybean oil meal, corn gluten meal, corn gluten feed, corn meal, corn feed meal, hominy feed, alfalfa meal, oats, barley, wheat bran, wheat middlings, mill run wheat screenings, calcium carbonate, salt.
Grandin's Start-To-Finish Mash . . . . . D. H. Grandin Milling Co. . Jamestown, N. Y.	G. 16.00 F. 18.61	4.00 5.30	50.00 57.48	- 9.14	- 9.47	7.00 6.57	Cod liver oil, dried buttermilk, meat and bone scrap, fish meal, soybean oil meal, corn gluten feed, alfalfa leaf meal, yellow corn meal, hominy feed, oats, barley, wheat bran, wheat middlings, mill run wheat screenings, calcium carbonate, salt.
Daily Egg Laying Mash Feed . Great Atlantic & Pacific Tea Co. . . . . New York, N. Y.	G. 20.00 F. 21.80	4.00 5.24	55.50 52.16	- 11.44	- 9.36	6.50 6.68	Oats, barley, soybean oil meal, linseed meal, corn gluten meal, wheat standard middlings, wheat bran, alfalfa meal, corn feed meal, dried buttermilk, dried skimmed milk, meat and bone scrap, fish meal, wheat flour middlings, cod liver oil, cod liver meal, calcium carbonate, steamed bone meal, salt, iron oxide, potassium iodide.

Daily Growth Chick Starter .	G.	16.00	4.00	58.00	-	-	5.00	Dried buttermilk, dried skimmed milk, meat and bone scrap, wheat flour, wheat standard middlings, corn meal, corn feed meal, oats, oat groats, linseed meal, alfalfa leaf meal, cod liver oil, calcium carbonate, salt, steamed bone meal.
Great Atlantic & Pacific Tea Co.	F.	17.20	4.73	60.39	7.31	10.37	5.51	
New York, N. Y.								
Daily Growth Growing Mash .	G.	17.50	4.00	56.50-	-	-	6.50	Meat and bone scrap, dried buttermilk, dried skimmed milk, wheat bran, alfalfa meal, wheat standard middlings, corn feed meal, oats, barley, linseed meal, corn gluten feed, cod liver oil, calcium carbonate, steamed bone meal, salt.
Great Atlantic & Pacific Tea Co.	F.	17.86	4.81	58.88	8.89	9.56	7.56	
New York, N. Y.								
Cheshire County Mash	G.	18.00	4.00	50.00	-	-	5.00	Wheat bran, corn meal, corn gluten feed, beef scraps, wheat middlings, rolled oats, alfalfa leaf meal, calcium carbonate, salt.
E. C. & W. L. Hopkins . . .	F.	20.00	5.33	52.89	11.84	9.94	6.16	
Greenfield, N. H.								
Granite State Breeder Mash .	G.	20.00	4.00	50.00	-	-	6.00	Corn meal, wheat middlings, wheat bran, barley, meat scraps, fish meal, kelp, alfalfa leaf meal, oats, dried skimmed milk, calcium carbonate, cod liver oil.
E. C. & W. L. Hopkins . . .	F.	21.89	4.76	50.90	11.93	10.52	4.68	
Greenfield, N. H.								

Brand and Manufacturer	Pounds in 100 lbs. of Feeding Stuffs						Certified by Manufacturer to Contain
	Protein	Fat	Carbo-hydrates	Ash	Moisture	Crude Fiber	
Granite State Complete Mash E. C. & W. L. Hopkins . . . Greenfield, N. H.	G. 15.00 F. 19.79	4.00 5.52	56.00 52.95	- 11.38	- 10.36	9.00 6.30	Corn meal, oat meal, wheat meal, wheat bran, wheat middlings, alfalfa leaf meal, soybean oil meal, kelp, dried skimmed milk, meat scraps, fish meal, calcium carbonate, cod liver oil.
Granite State Egg Mash with kelp . . . . . . E. C. & W. L. Hopkins . . . Greenfield, N. H.	G. 19.00 F. 21.89	4.00 6.45	50.00 49.37	- 12.51	- 9.78	5.50 5.99	Dried skimmed milk, oats, corn, wheat middlings, wheat bran, barley, meat scraps, alfalfa leaf meal, kelp, fish meal, calcium carbonate, cod liver oil.
Granite State Growing Mash . E. C. & W. L. Hopkins . . . Greenfield, N. H.	G. 17.00 F. 20.27	4.00 5.30	58.00 52.79	- 11.46	- 10.18	6.50 5.43	Corn meal, wheat bran, wheat middlings, wheat red dog, wheat, alfalfa leaf meal, oats, meat scraps, dried skimmed milk, kelp, fish meal, calcium carbonate, cod liver oil.
New Hampshire Laying Mash . E. C. & W. L. Hopkins . . . Greenfield, N. H.	G. 17.00 F. 18.21	4.00 6.40	55.00 54.37	- 10.90	- 10.12	5.00 6.90	Yellow corn meal, wheat bran, wheat flour middlings, oats, meat scraps, dried skimmed milk, fish meal, alfalfa leaf meal, calcium carbonate, salt, cod liver oil.

P and Q Complete Starting and Growing	G.	16.00	4.00	50.00	-	-	7.00	Wheat bran, wheat middlings, corn meal, oats, wheat red dog, soybean oil meal, beef scraps, alfalfa meal, fish meal, dried skimmed milk, barley, calcium carbonate, salt, cod liver oil.
E. C. & W. L. Hopkins . . . Greenfield, N. H.	F.	19.23	4.13	57.39	8.91	10.34	6.15	
P and Q Laying Mash	G.	17.00	3.50	52.00	-	-	8.00	Wheat bran, wheat middlings, corn meal, oats, barley, corn gluten feed, dried skimmed milk, soybean oil meal, beef scraps, alfalfa meal, calcium carbonate, salt, cod liver oil.
E. C. & W. L. Hopkins . . . Greenfield, N. H.	F.	18.69	4.47	58.91	8.17	9.76	8.00	
Independent Feed Board Egg Mash	G.	18.00	4.00	53.00	-	-	6.50	Yellow corn meal, wheat bran, mill run wheat screenings, wheat flour middlings, oats, meat scraps, fish meal, alfalfa leaf meal, dried skimmed milk, oyster shell meal, cod liver oil, dicalcium phosphate, salt.
Independent Grain Dealers' Association . . . . . Manchester, N. H.	F.	17.51	4.96	57.35	10.43	9.75	7.62	
Johnson's Mash Feed	G.	18.00	4.00	50.00	-	-	7.00	Corn meal, oats, wheat middlings, wheat bran, meat scraps, corn gluten feed, alfalfa meal, charcoal, soybean oil meal, dried skimmed milk, calcite flour, bone meal, cod liver oil, salt.
Ralph P. Johnson & Son . . . Potter Place, N. H.	F.	18.19	4.88	56.50	11.10	9.33	6.02	

Brand and Manufacturer	Pounds in 100 lbs. of Feeding Stuffs						Certified Manufacturer to Contain
	Protein	Fat	Carbo-hydrates	Ash	Moisture	Crude Fiber	
Apex Growing Mash	G. 16.00	4.00	50.00	-	-	8.50	Wheat bran, wheat middlings, corn meal, linseed meal, oats, meat scraps, bone meal, fish meal, dried skimmed milk, salt, calcite cod liver oil, alfalfa meal, milk sugar feed, barley.
Kasco Mills	F. 17.86	5.65	57.07	8.66	10.76	5.13	
Waverly, N. Y.							
Apex Laying Mash	G. 20.00	4.00	50.00	-	-	8.50	Wheat bran, wheat middlings, corn meal, linseed meal, soy-bean oil meal, oats, meat scraps, bone meal, fish meal, dried skimmed milk, milk sugar feed, barley, salt, calcite, cod liver oil, alfalfa meal.
Kasco Mills	F. 21.36	5.39	53.15	9.79	10.31	5.08	
Waverly, N. Y.							
Kasco All Mash Chick Food .	G. 17.00	4.00	55.00	-	-	5.50	Wheat red dog, oat meal, wheat middlings, wheat bran, corn meal, meat scraps, fish meal, bone meal, linseed meal, dried skimmed milk, milk sugar feed, salt, calcite, cod liver oil, alfalfa leaf meal.
Kasco Mills	F. 19.22	6.14	55.19	9.42	10.03	4.76	
Waverly, N. Y.							
Kasco All Mash Laying Food .	G. 15.00	4.00	55.00	-	-	6.00	Wheat bran, wheat middlings, corn meal, linseed meal, soy-bean oil meal, oat meal, barley, wheat red dog, meat scraps, bone meal, fish meal, dried skimmed milk, milk sugar feed, salt, calcite, cod liver oil, alfalfa meal, oats.
Kasco Mills	F. 16.34	5.79	59.97	7.14	10.76	4.78	
Waverly, N. Y.							

Kasco Laying Mash	G.	20.00	4.00	50.00	-	-	6.50	Wheat bran, wheat middlings, corn meal, linseed meal, soybean oil meal, oat meal, wheat red dog, meat scraps, bone meal, fish meal, dried skimmed milk, milk sugar feed, salt, calcite, cod liver oil, alfalfa meal, oats.
Kasco Mills	F.	22.24	6.25	50.86	10.83	9.82	5.81	
Waverly, N. Y.								
Kasco Poultry Flushing Mash .	G.	17.00	4.00	55.00	-	-	5.50	Wheat red dog, oat meal, wheat middlings, wheat bran, corn meal, meat scraps, fish meal, bone meal, linseed meal, milk sugar feed, salt, calcite, cod liver oil, alfalfa leaf meal.
Kasco Mills	F.	17.86	4.29	57.82	10.39	9.64	3.81	
Waverly, N. Y.								
Kasco Turkey Grower	G.	20.00	4.00	55.00	-	-	8.00	Wheat bran, wheat middlings, linseed meal, corn meal, oats, meat scraps, bone meal, dried skimmed milk, milk sugar feed, fish meal, soybean oil meal, salt, calcite, cod liver oil, alfalfa meal, corn gluten meal.
Kasco Mills	F.	21.01	5.58	53.85	10.11	9.45	7.44	
Waverly, N. Y.								
Larro Broiler Feed	G.	18.00	4.00	56.50	-	-	6.50	Yellow corn meal, wheat standard middlings, alfalfa meal, wheat bran, meat and bone scrap, dried buttermilk, soybean oil meal, fish meal, dried skimmed milk, oats, anti-rachitic oil, limestone, salt.
Larrowe Milling Co.	F.	19.96	4.53	55.97	9.66	9.88	5.32	
Detroit, Mich.								

Brand and Manufacturer	Pounds in 100 lbs. of Feeding Stuffs						Certified by Manufacturer to Contain
	Protein	Fat	Carbo-hydrates	Ash	Moisture	Crude Fiber	
Larro Chick Builder	G. 19.00	4.00	53.00	-	-	7.00	Wheat bran, yellow corn meal, wheat standard middlings, barley, meat and bone scrap, soybean oil meal, fish meal, alfalfa meal, dried skimmed milk, dried buttermilk, oats, cod liver oil, limestone, salt.
Larrowe Milling Co.	F. 21.23	4.82	55.06	9.34	9.55	6.37	
Detroit, Mich.							
Larro Egg Mash	G. 20.00	4.00	52.50	-	-	7.50	Wheat bran, yellow corn meal, wheat standard middlings, barley, meat and bone scrap, soybean oil meal, fish meal, alfalfa meal, dried skimmed milk, dried buttermilk, oats, cod liver oil, limestone, salt
Larrowe Milling Co.	F. 21.84	4.73	53.74	9.82	9.87	6.14	
Detroit, Mich.							
Larro Growing Mash	G. 16.00	4.00	57.50	-	-	7.50	Yellow corn meal, wheat standard middlings, wheat bran, meat and bone scrap, alfalfa meal, oats, dried buttermilk, dried skimmed milk, soybean oil meal, limestone salt, cod liver oil.
Larrowe Milling Co.	F. 16.90	4.82	60.07	8.84	9.37	6.57	
Detroit, Mich.							
B-B Bull Brand All Mash Starter and Growing Ration .	G. 17.00	4.00	55.00	-	-	7.00	Cod liver oil, milk sugar feed, dried buttermilk, alfalfa leaf meal, wheat bran, wheat middlings, mill run screenings soybean oil meal, corn meal, barley, oats, wheat, oat meal, meat meal, fish meal, steamed bone meal, calcium carbonate, salt, potassium iodide.
Maritime Milling Co.	F. 18.12	5.87	58.17	8.26	9.58	6.90	
Buffalo, N. Y.							

B-B Bull Brand Broiler Ration Maritime Milling Co. . . . . Buffalo, N. Y.	G. F.	18.50 19.44	4.00 5.73	55.00 56.35	- 8.23	- 10.25	6.00 7.04	Cod liver oil, milk sugar feed, dried buttermilk, alfalfa leaf meal, wheat bran, mill run screenings, wheat flour middlings, corn meal, barley, oat meal, soybean oil meal, corn gluten meal, linseed meal, meat meal, fish meal, steamed bone meal, calcium carbonate, salt, potassium iodide.
B-B Bull Brand Complete Chick Starter Ration	G.	20.00	4.00	60.00	-	-	6.00	Cod liver oil, milk sugar feed, dried buttermilk, alfalfa leaf meal, wheat middlings, corn gluten meal, corn meal, oats, barley, soybean oil meal, meat meal, fish meal, wheat, steamed bone meal, calcium carbonate, salt, potassium iodide.
Maritime Milling Co. . . . . Buffalo, N. Y.	F.	22.10	5.50	55.03	7.54	9.83	6.33	
B-B Bull Brand Complete Growing Ration	G.	14.00	4.00	55.00	-	-	7.00	Cod liver oil, milk sugar feed, dried buttermilk, alfalfa leaf meal, alfalfa meal, wheat bran, wheat middlings, mill run screenings, corn meal, oat meal, barley, soybean oil meal, corn gluten meal, meat meal, fish meal, steamed bone meal, calcium carbonate, salt, potassium iodide.
Maritime Milling Co. . . . . Buffalo, N. Y.	F.	16.37	5.20	60.63	7.49	10.31	7.31	

Brand and Manufacturer	Pounds in 100 lbs. of Feeding Stuffs						Certified by Manufacturer to Contain
	Protein	Fat	Carbo-hydrates	Ash	Moisture	Crude Fiber	
B-B Bull Brand Laying Mash Maritime Milling Co. . . . . Buffalo, N. Y.	G. 20.00 F. 22.07	4.50 5.60	50.00 50.58	- 12.27	- 9.48	7.00 8.13	Cod liver oil, milk sugar feed, dried buttermilk, alfalfa meal, corn gluten meal, wheat bran, wheat middlings, mill run screenings, soybean oil meal, corn meal, oats, barley, oat meal, meat meal, fish meal, steamed bone meal, calcium carbonate, salt, potassium iodide.
B-B Daisy Egg Mash . . . . . Maritime Milling Co. . . . . Buffalo, N. Y.	G. 20.00 F. 22.42	3.50 5.56	55.00 51.49	- 11.03	- 9.50	9.00 8.02	Cod liver oil, dried buttermilk, alfalfa meal, wheat bran, wheat middlings, mill run screenings, soybean oil meal, corn gluten meal, corn meal, barley, oats, meat meal, fish meal, steamed bone meal, calcium carbonate, salt.
B-B Fattening Mash . . . . . Maritime Milling Co. . . . . Buffalo, N. Y.	G. 13.00 F. 16.90	4.00 6.21	60.00 60.08	- 7.05	- 9.76	6.00 6.55	Milk sugar feed, dried buttermilk, wheat flour middlings, wheat middlings, mill run screenings, corn meal, corn germ meal, alfalfa meal, barley, corn gluten meal, linseed meal, oat meal, meat and bone meal, calcium carbonate, salt.

B-B Layer and Breeder Mash Maritime Milling Co. . . . . Buffalo, N. Y.	G. F.	20.00 21.45	4.50 6.85	50.00 49.71	- 13.03	- 8.96	7.00 6.73	Cod liver oil, milk sugar feed, dried buttermilk, alfalfa leaf meal, wheat bran, wheat middlings, mill run screenings, soybean oil meal, corn gluten meal, corn meal, oats, barley, oat meal, meat and bone meal, fish meal, calcium carbonate, salt, potassium iodide.
Arthur's Mash . . . . . . McQuesten & Lewis Co. . . . Manchester, N. H.	G. F.	14.00 14.71	4.00 4.47	60.00 61.05	- 8.44	- 11.33	7.00 4.38	Beef scraps, charcoal, corn, wheat mixed feed, bone meal, fish meal, linseed meal, skimmed milk, wheat, epsom salts, sulphur, cod liver oil, oyster shell meal, salt.
Broiler Mash . . . . . . McQuesten & Lewis Co. . . . . Manchester, N. H.	G. F.	14.00 17.33	4.00 5.09	60.00 58.64	- 7.82	- 11.12	7.00 4.11	Corn meal, wheat bran, wheat middlings, oats, fish meal, skimmed milk, alfalfa leaf meal, charcoal, bone meal, linseed meal, oyster shell meal, epsom salts, cod liver oil, salt.
Merrimack All Mash . . . . . Merrimack Farmers' Exchange . Concord, N. H.	G. F.	15.00 17.34	4.00 5.36	60.00 60.09	- 7.09	- 10.12	6.00 4.07	Corn meal, soybean oil meal, oats, oat groats, wheat bran, cracked wheat, alfalfa meal, meat scraps, fish meal, salt, dried skimmed milk, bone meal, calcite flour, cod liver oil.

Brand and Manufacturer		Pounds in 100 lbs. of Feeding Stuffs						Certified by Manufacturer to Contain
		Protein	Fat	Carbo-hydrates	Ash	Moisture	Crude Fiber	
Merrimack Laying Mash	G.	18.00	4.25	50.00	-	-	5.00	Corn meal, wheat bran, wheat wheat red dog, wheat middlings, oat groats, oats, alfalfa leaf meal, dried skimmed milk, fish meal, meat scraps, bone meal, calcium carbonate, salt, soybean oil meal.
Merrimack Farmers' Exchange . Concord, N. H.	F.	19.22	5.77	55.51	9.35	10.15	4.84	
Merrimack Special Mash	G.	18.00	5.00	50.00	-	-	8.00	Soybean oil meal, wheat middlings, corn meal, alfalfa meal, wheat bran, oats, meat scraps, fish meal, calcium carbonate, salt.
Merrimack Farmers' Exchange . Concord, N. H.	F.	20.22	5.89	54.31	9.44	10.14	5.64	
Merrimack Super Mash	G.	18.00	5.00	50.00	-	-	5.00	Corn meal, wheat bran, wheat middlings, alfalfa leaf meal, oat groats, meat scraps, fish meal, dried skimmed milk, bone meal, calcium carbonate, salt, soybean oil meal.
Merrimack Farmers' Exchange . Concord, N. H.	F.	19.26	4.47	57.26	9.14	9.87	4.47	
Bidwell Dry Mash	G.	18.00	3.00	50.00	-	-	8.00	Dried buttermilk, alfalfa meal, corn meal, wheat bran, wheat middlings, fish meal, meat, bone, linseed meal, corn gluten meal, soybean oil meal, calcium carbonate, salt, wheat, barley, kaffir corn, buckwheat, cod liver oil.
Park & Pollard Co. . . . . Boston, Mass.	F.	21.05	4.23	58.48	7.22	9.02	8.00	

Bidwell Growing Feed	G.	15.00	3.00	50.00	-	-	7.00	Dried buttermilk, corn meal, alfalfa meal, oats, wheat, meat, bone, corn gluten meal, buckwheat, wheat bran, soybean oil meal, barley, fish meal, calcium carbonate, salt, cod liver oil.
Park & Pollard Co.	F.	17.12	4.50	61.68	7.58	9.12	8.18	
Boston, Mass.								
Lay or Bust Dry Mash	G.	18.00	3.00	50.00	-	-	7.00	Dried buttermilk, alfalfa leaf meal, corn gluten meal, fish meal, meat and bone scrap, linseed meal, soybean oil meal, wheat bran, wheat middlings, calcium carbonate, salt, grain screenings from corn, wheat, oats, barley, kaffir corn and buckwheat, cod liver oil.
Park & Pollard Co.	F.	19.65	4.84	56.50	9.42	9.59	6.52	
Boston, Mass.								
Manamar Life Cycle Mash . .	G.	16.00	3.50	55.00	-	-	6.00	Kelp, fish meal, sea shells, meat scraps, wheat bran, soybean oil meal, wheat middlings, alfalfa leaf meal, dried buttermilk, yellow corn meal, oats, wheat, barley, buckwheat, cod liver oil.
Park & Pollard Co.	F.	17.91	5.40	58.81	8.34	9.54	7.11	
Boston, Mass.								
Park & Pollard Starter and Broiler Mash	G.	18.00	4.00	50.00	-	-	6.00	Yellow corn meal, wheat bran, wheat flour middlings, oats, fish meal, meat scraps, alfalfa leaf meal, calcium carbonate, salt, dried skimmed milk, cod liver oil.
Park & Pollard Co.	F.	19.13	5.47	55.99	10.31	9.10	6.73	
Boston, Mass.								

Brand and Manufacturer		Pounds in 100 lbs. of Feeding Stuffs						Certified by Manufacturer to Contain
		Protein	Fat	Carbo-hydrates	Ash	Moisture	Crude Fiber	
Protena Laying Mash	G.	18.00	3.50	52.50	-	-	8.50	Meat scraps, soybean oil meal, linseed meal, corn meal, dried buttermilk, cod liver oil, sardine oil, alfalfa meal, wheat middlings, wheat bran, calcium carbonate, salt.
Purina Mills St. Louis, Mo.	F.	19.74	4.75	54.63	10.55	10.33	6.91	
Purina Egg Chowder	G.	19.00	3.50	52.00	-	-	8.00	Carotene, dried buttermilk, cod liver oil, sardine oil, meat scraps, soybean oil meal, linseed meal, alfalfa meal, corn germ meal, wheat middlings, wheat bran, corn meal, iodized salt, calcium carbonate.
Purina Mills St. Louis, Mo.	F.	20.23	5.94	53.79	10.85	9.19	7.26	
Purina Lay Chow	G.	19.00	3.50	52.00	-	-	8.00	Carotene, dried buttermilk, cod liver oil, sardine oil, meat scraps, soybean oil meal, linseed meal, alfalfa meal, corn germ meal, wheat middlings, wheat bran, corn meal, iodized salt, calcium carbonate.
Purina Mills St. Louis, Mo.	F.	20.97	6.57	51.86	11.15	9.45	6.37	

Purina Layena	G.	15.50	3.50	55.00	-	-	8.00	Carotene, dried buttermilk, cod liver oil, sardine oil, meat scraps, soybean oil meal, alfalfa meal, wheat middlings, dried beet pulp, corn meal, iodized salt, calcium carbonate.
Purina Mills	F.	17.47	5.74	57.26	9.66	9.87	5.05	
St. Louis Mo.								
Purina Turkey Growing and Fattening Chow	G.	21.00	3.50	51.00	-	-	8.00	Carotene, meat scraps, soybean oil meal, alfalfa meal, corn meal, wheat middlings, wheat bran, iodized salt.
Purina Mills	F.	23.29	5.85	52.62	6.95	11.29	5.24	
St. Louis, Mo.								
Big Egg Laying Mash	G.	18.00	4.00	58.00	-	-	8.00	Hominy feed, yellow hominy feed, wheat bran, wheat standard middlings, oats, soybean oil meal, meat scraps, sardine oil, dried skimmed milk, molasses, alfalfa meal, salt.
Quaker Oats Co.	F.	18.87	5.30	60.12	6.74	8.97	6.83	
Chicago, Ill.								
Quaker Ful-O-Pep Broiler Mash	G.	19.00	5.00	54.00	-	-	7.00	Oat meal, yellow hominy feed, wheat bran, wheat middlings, fish meal, cod liver meal, meat scraps, sardine oil, dried skimmed milk, dried buttermilk, molasses, alfalfa meal, salt.
Quaker Oats Co.	F.	19.22	6.76	57.92	6.70	9.40	5.33	
Chicago, Ill.								

Brand and Manufacturer		Pounds in 100 lbs. of Feeding Stuffs						Certified by Manufacturer to Contain
		Protein	Fat	Carbo-hydrates	Ash	Mois-ture	Crude Fiber	
Quaker Ful-O-Pep Chick Starter	G.	17.00	5.00	57.00	-	-	7.00	Oat meal, yellow hominy feed, wheat bran, wheat standard middlings, fish meal, cod liver meal, meat scraps, sardine oil, dried skimmed milk, dried buttermilk, molasses, alfalfa meal, salt.
Quaker Oats Co. . . . . Chicago, Ill.	F.	16.83	5.31	63.48	5.24	9.14	5.97	
Quaker Ful-O-Pep Egg Mash . .	G.	20.00	4.50	53.00	-	-	8.00	Oat meal, hominy feed, yellow hominy feed, wheat bran, wheat standard middlings, barley meal, fish meal, cod liver meal, meat scraps, sardine oil, dried skimmed milk, dried buttermilk, molasses, alfalfa meal, salt.
Quaker Oats Co. . . . . Chicago, Ill.	F.	20.88	6.21	56.13	8.61	8.17	6.76	
Quaker Ful-O-Pep Growing Mash	G.	19.00	5.00	53.00	-	-	6.00	Oat meal, yellow hominy feed, wheat bran, wheat standard middlings, barley meal, fish meal, cod liver meal, meat scraps, sardine oil, dried skimmed milk, dried buttermilk, molasses, alfalfa meal, salt.
Quaker Oats Co. . . . . Chicago, Ill.	F.	18.65	5.71	60.10	7.12	8.42	5.74	

Wirthmore Baby Chick Starter St. Albans Grain Co. . . . . St. Albans, Vt.	G. F.	18.00 19.83	4.00 5.22	58.00 56.68	- 7.85	- 10.42	5.00 5.00	Cod liver oil, dried skimmed milk, dried whey, alfalfa leaf meal, fish meal, meat scraps, corn gluten meal, soybean oil meal, wheat bran, wheat middlings, oat groats, wheat, yellow corn meal, calcium carbonate, salt.
Wirthmore Breeder Mash . . . St. Albans Grain Co. . . . . St. Albans, Vt.	G. F.	20.00 21.36	4.50 5.45	50.00 55.12	- 8.49	- 9.58	7.00 5.24	Cod liver oil, dried skimmed milk, dried whey, liver meal, meat scraps, fish meal, yellow corn meal, alfalfa leaf meal, soybean oil meal, corn gluten meal, wheat bran, wheat middlings, oats, barley, calcium carbonate, salt.
Wirthmore Complete Chick Starter and Broiler Ration . St. Albans Grain Co. . . . . St. Albans, Vt.	G. F.	17.50 19.22	4.00 5.22	58.00 57.21	- 8.29	- 10.06	5.50 4.64	Cod liver oil, dried skimmed milk, dried whey, oat groats, meat scraps, fish meal, alfalfa leaf meal, corn gluten meal, soybean oil meal, yellow corn meal, wheat bran, wheat middlings, calcium carbonate, salt.

Brand and Manufacturer		Pounds in 100 lbs. of Feeding Stuffs						Certified by Manufacturer to Contain
		Protein	Fat	Carbo-hydrates	Ash	Moisture	Crude Fiber	
Wirthmore Complete Growing Ration	G.	14.00	3.75	65.00	-	-	6.00	Cod liver oil, dried skimmed milk, dried whey, meat scraps, fish meal, soybean oil meal, corn gluten meal, yellow corn meal, wheat, oats, barley, wheat bran, wheat middlings, alfalfa leaf meal, calcium carbonate, salt.
St. Albans Grain Co. . . . . St. Albans, Vt.	F.	14.10	4.81	64.34	6.42	10.33	4.72	
Wirthmore Complete Laying Ration	G.	15.00	4.00	60.00	-	-	5.00	Cod liver oil, dried skimmed milk, dried whey, liver meal, meat scraps, fish meal, oat groats, yellow corn meal, alfalfa leaf meal, wheat bran, wheat middlings, calcium carbonate, salt.
St. Albans Grain Co. . . . . St. Albans, Vt.	F.	16.24	4.93	60.00	7.82	11.01	4.11	
Wirthmore Fleshing Pellets .	G.	15.00	4.50	60.00	-	-	6.50	Dried skimmed milk, meat scraps, soybean oil meal, corn germ meal, oat meal, wheat bran, wheat middlings, wheat red dog, yellow corn meal, alfalfa meal, calcium carbonate, salt, cod liver oil, molasses.
St. Albans Grain Co. . . . . St. Albans, Vt.	F.	16.15	4.74	61.50	7.39	10.22	5.50	
Wirthmore Growing Mash . . .	G.	15.00	4.50	55.00	-	-	6.00	Cod liver oil, dried skimmed milk, dried whey, meat scraps, fish meal, yellow corn meal, alfalfa leaf meal, linseed meal, wheat, oats, barley, soybean oil meal, corn gluten meal, wheat bran, wheat middlings, wheat red dog, calcium carbonate, salt.
St. Albans Grain Co. . . . . St. Albans, Vt.	F.	17.20	5.52	58.90	7.97	10.41	5.19	

Wirthmore Laying Mash . . . . St. Albans Grain Co. . . . . St. Albans, Vt.	G. F.	20.00 20.09	4.00 5.27	50.00 56.34	- 8.36	- 9.94	7.00 4.37	Cod liver oil, dried skimmed milk, dried whey, meat scraps, fish meal, yellow corn meal, alfalfa meal, linseed meal, soybean oil meal, corn gluten meal, wheat bran, wheat middlings, wheat, oats, barley, buckwheat, calcium carbonate, salt.
Strafford County Mash . . . . Strafford County Grain Mill . Rochester, N. H.	G. F.	17.00 21.19	5.00 5.06	57.00 53.28	- 10.44	- 10.03	10.00 4.69	Wheat bran, wheat middlings, corn meal, corn gluten feed, meat scraps, cod liver oil, fish meal, bone meal, calcium carbonate, salt.
Blue Seal Breeders' Mash . . . H. K. Webster Co. . . . . . Lawrence, Mass.	G. F.	19.00 20.79	4.00 4.91	54.00 54.79	- 10.21	- 9.30	6.00 5.15	Yellow corn meal, wheat bran, wheat flour middlings, wheat, oats, barley, corn gluten meal, meat scraps, dried skimmed milk, cod fish meal, alfalfa leaf meal, salt, calcium carbonate, cod liver oil.
Blue Seal Chick Starter . . . H. K. Webster Co. . . . . . Lawrence, Mass.	G. F.	18.00 20.57	4.00 4.88	55.00 57.02	- 6.62	- 10.91	6.00 5.56	Yellow corn, oats, barley, corn gluten meal, wheat bran, wheat flour middlings, meat scraps, dried skimmed milk, alfalfa leaf meal, calcium carbonate, salt, cod liver oil.

Brand and Manufacturer	Pounds in 100 lbs. of Feeding Stuffs						Certified by Manufacturer to Contain
	Protein	Fat	Carbo-hydrates	Ash	Moisture	Crude Fiber	
Blue Seal College Mash . . .	G. 17.00	4.50	55.00	-	-	6.00	Yellow corn meal, wheat bran, wheat flour middlings, oats, meat scraps, cod fish meal, alfalfa leaf meal, dried skimmed milk, calcium carbonate, salt, cod liver oil.
H. K. Webster Co.	F. 21.54	7.15	51.84	10.01	9.46	6.00	
Lawrence, Mass.							
Blue Seal Egg Mash	G. 19.00	4.50	54.00	-	-	6.00	Yellow corn meal, oats, wheat bran, wheat middlings, meat scraps, dried skimmed milk, alfalfa leaf meal, cane molasses, corn gluten meal, calcium carbonate, salt, cod liver oil.
H. K. Webster Co.	F. 19.17	4.95	55.16	9.32	11.40	5.01	
Lawrence, Mass.							
Blue Seal Fleshing Pellets .	G. 15.00	5.00	61.00	-	-	4.00	Yellow corn meal, oat meal, wheat middlings, soybean oil meal, meat scraps, dried skimmed milk, cane molasses, calcium carbonate, salt, cod liver oil.
H. K. Webster Co.	F. 18.95	4.80	57.74	6.21	12.30	3.76	
Lawrence, Mass.							
Blue Seal Laying Mash . . .	G. 20.00	3.50	54.00	-	-	6.00	Yellow corn meal, wheat bran, oats, meat scraps, corn gluten meal, wheat flour middlings, barley, wheat, cane molasses, alfalfa leaf meal, dried skimmed milk, cod fish meal, salt, calcium carbonate, cod liver oil.
H. K. Webster Co.	F. 22.07	5.64	52.60	9.33	10.36	5.73	
Lawrence, Mass.							

Whiting All Mash Laying . . .	G.	15.00	4.00	60.00	-	-	5.00	Corn, wheat, wheat bran, wheat red dog, oats, oat groats, alfalfa leaf meal, dried skimmed milk, meat scraps, fish meal, calcium carbonate, salt, cod liver oil.
David Whiting & Sons	F.	17.08	4.95	58.88	8.23	10.86	4.58	
Wilton, N. H.								
Whiting Laying Mash	G.	17.00	4.00	55.00	-	-	5.00	Yellow corn meal, wheat bran, wheat flour middlings, oats, meat scraps, dried skimmed milk, fish meal, alfalfa leaf meal, calcium carbonate, salt, cod liver oil.
David Whiting & Sons	F.	18.04	6.53	53.66	11.81	9.96	7.66	
Wilton, N. H.								
Whiting Special Mash	G.	18.00	4.00	50.00	-	-	5.00	Standard wheat bran, corn meal, corn gluten feed, beef scraps, wheat white middlings, rolled oats, alfalfa leaf meal, calcium carbonate, salt, dried skimmed milk, cod liver oil.
David Whiting & Sons	F.	19.87	6.06	51.61	12.59	9.87	7.51	
Wilton, N. H.								
SOYBEAN OIL MEAL								
Super Soy	G.	37.00	4.50	33.50	-	-	6.50	Soybean oil meal, limestone, steamed bone meal, salt.
Allied Mills	F.	38.57	4.87	36.79	11.16	8.61	-	
Chicago, Ill.								

Brand and Manufacturer		Pounds in 100 lbs. of Feeding Stuffs						Certified by Manufacturer to Contain
		Protein	Fat	Carbo-hydrates	Ash	Mois-ture	Crude Fiber	
Central Soybean Oil Meal . .	G.	41.00	4.50	35.00	-	-	7.00	
Central Soya Co.	F.	41.20	5.38	37.34	6.44	9.64	-	
Decatur, Ind.								
Funk's Soybean Oil Meal . . .	G.	41.00	4.50	33.00	-	-	7.00	
Funk Brothers Seed Co. . . .	F.	43.96	6.68	34.15	6.65	8.56	-	
Bloomington, Ill.								
Expeller Process Soybean Oil Meal	G.	41.00	4.50	37.00	-	-	7.00	
Norris Grain Co.	F.	43.34	4.50	33.61	5.92	12.63	-	
Chicago, Ill.								
Kellogg's Old Process Soybean Oil Meal	G.	41.00	4.50	36.00	-	-	7.00	
Spencer Kellogg & Sons . . .	F.	41.11	6.29	37.67	6.34	8.59	-	
Chicago, Ill.								
Staley's Soybean Oil Meal . .	G.	41.00	4.50	36.00	-	-	7.00	
A. E. Staley Mfg. Co.	F.	41.15	5.35	39.24	6.21	8.05	-	
Decatur, Ill.								
STOCK FEED								
Pennant Brand Stock Feed . .	G.	9.50	4.00	70.00	-	-	9.50	White hominy feed, oat meal mill by-products, linseed meal, barley, salt, cane molasses.
E. W. Bailey & Co.	F.	10.33	4.31	69.96	6.32	9.08	9.08	
Montpelier, Vt.								
Barco Stock Feed	G.	9.50	4.50	70.00	-	-	9.50	White hominy, oat middlings, oat hulls, oat shorts, linseed meal, barley.
G. N. Bartemus Co.	F.	9.54	5.37	72.18	3.83	9.08	8.63	
Concord, N. H.								

Concord Stock Feed	G.	7.50	2.80	70.00	-	-	14.45	Corn meal or hominy feed,
G. N. Bartemus Co.	F.	9.19	5.10	71.64	5.34	8.73	14.32	oat middlings, oat shorts,
Concord, N. H.								oat hulls, salt.
Garland Stock Feed	G.	8.50	4.00	50.00	-	-	12.00	Corn, oats, hominy feed,
E. A. Cowee Co.	F.	10.42	5.57	68.81	5.51	9.69	10.24	oat hulls, oat middlings,
Fitchburg, Mass.								oat shorts, calcium car-
								bonate, salt.
Delaware White Stock Feed .	G.	9.00	3.00	65.00	-	-	12.00	Corn meal, hominy feed,
Delaware Mills	F.	11.20	3.62	69.81	5.75	9.62	12.32	wheat middlings, barley, oat
Deposit, N. Y.								middlings, oat hulls, oat
								shorts, salt, calcium car-
								bonate, calcium phosphate.
Frederick Stock Feed	G.	7.50	3.00	72.00	-	-	12.00	Corn feed meal, oats, oat
Dietrich & Gambrill	F.	10.15	4.32	71.90	3.99	9.64	10.87	middlings, oat shorts, oat
Frederick, Md.								hulls, salt.
North Star Stock Feed . . .	G.	9.00	3.00	50.00	-	-	12.00	Corn meal, wheat middlings,
Farm Service Stores	F.	10.59	4.34	70.71	4.51	9.85	10.52	wheat screenings, wheat red
Fitchburg, Mass.								dog, barley, oat meal mill
								by-products, salt.
Grandin's Stock Food . . .	G.	8.50	4.00	55.00	-	-	12.00	Corn meal, corn feed meal,
D. H. Grandin Milling Co. .	F.	11.61	4.92	70.03	4.62	8.82	11.63	hominy feed, barley, wheat
Jamestown, N. Y.								middlings, mill run wheat
								screenings, oat mill feed,
								salt.

Brand and Manufacturer	Pounds in 100 lbs. of Feeding Stuffs						Certified by Manufacturer to Contain
		Protein	Fat	Carbo-hydrates	Ash	Moisture	Crude Fiber	
Granite State Stock Feed . .	G.	9.00	5.00	60.00	-	-	10.00	White hominy, wheat red dog, oat by-products, oat middlings, oat hulls, oat shorts, salt.
E. C. & W. L. Hopkins	F.	9.19	5.47	71.19	5.73	8.42	8.69	
Greenfield, N. H.								
Stock Feed	G.	9.00	3.00	60.00	-	-	12.00	Corn, hominy feed, linseed meal, barley, low grade wheat flour, wheat bran, wheat middlings, mill run screenings, corn gluten meal, oat hulls, salt.
McQuesten & Lewis Co.	F.	13.00	4.69	66.16	5.83	10.32	8.89	
Manchester, N. H.								
Merrimack Stock Feed	G.	9.00	4.00	60.00	-	-	11.00	Molasses, soybean oil meal, hominy feed, oat mill feed, oats, salt, calcium carbonate, linseed meal, barley.
Merrimack Farmers' Exchange .	F.	10.42	4.34	69.95	6.53	8.76	10.85	
Concord, N. H.								
Park and Pollard Stock Feed .	G.	9.00	4.00	50.00	-	-	12.00	Barley, corn, oats, hominy feed, oat hulls, oat middlings, oat shorts, molasses, calcium carbonate, salt.
Park & Pollard Co.	F.	11.21	4.55	68.52	6.99	8.73	9.63	
Boston, Mass.								
Quaker Sugared Schumacher Feed	G.	10.00	3.00	67.00	-	-	12.00	Corn meal, hominy feed, yellow hominy feed, barley meal, soybean oil meal, low grade wheat flour, wheat standard middlings, oat mill feed, salt, iodized ground limestone, bone meal, molasses.
Quaker Oats Co.	F.	10.46	3.51	70.76	7.49	7.78	11.29	
Chicago, Ill.								
Wirthmore Stock Feed	G.	9.00	4.00	70.00	-	-	9.50	Barley, oats, hominy feed, corn, oat meal mill by-products, cane molasses, bone meal, calcium carbonate, salt.
St. Albans Grain Co.	F.	10.20	5.54	67.96	7.19	9.11	8.87	
St. Albans, Vt.								

Stratton & Co.'s Stock Feed .	G.	7.50	2.83	66.00	-	-	14.43	Oat mill feed, corn bran,
Stratton & Co.	F.	8.88	7.80	70.04	4.09	9.19	12.39	cracked corn siftings, yellow
Concord, N. H.								corn meal.
WHEAT BRAN								
Atkinson's Wheat Bran	G.	14.00	4.00	49.00	-	-	12.00	Mill run screenings.
Atkinson Milling Co.	F.	16.90	4.25	62.08	6.00	10.77	-	
Minneapolis, Minn.								
Wheat Bran	G.	13.00	4.00	50.00	-	-	13.00	
Bradley & Baker	F.	15.54	4.15	62.24	6.56	11.51	-	
New York, N. Y.								
C and C Wheat Bran	G.	15.00	3.50	51.00	-	-	11.50	
Coatsworth & Cooper	F.	16.85	5.49	60.91	5.70	11.05	-	
Toronto, Canada								
Dairy Maid Bran	G.	13.00	2.50	57.00	-	-	13.00	Mill run screenings.
Federal Mill	F.	14.45	4.06	65.72	5.66	10.11	-	
Lockport, N. Y.								
Lucky Bran	G.	16.00	3.00	60.00	-	-	14.00	Mill run screenings.
Federal Mill	F.	17.25	4.71	61.64	6.08	10.32	-	
Lockport, N. Y.								
Bronco Bran	G.	15.00	3.50	52.00	-	-	11.50	
J. A. Forrest	F.	17.16	4.91	61.13	5.79	11.01	-	
Minneapolis, Minn.								

Brand and Manufacturer	Pounds in 100 lbs. of Feeding Stuffs						Certified by Manufacturer to Contain
		Protein	Fat	Carbo-hydrates	Ash	Moisture	Crude Fiber	
Hamco Wheat Bran	G.	15.00	3.50	51.00	-	-	11.50	
Frank B. Ham & Co. Toronto, Canada	F.	16.11	5.36	61.85	5.63	11.05	-	
Choice Wheat Bran	G.	13.50	3.50	48.50	-	-	14.00	Mill run screenings.
Hecker-Jones-Jewell Milling Co. Buffalo, N. Y.	F.	13.97	3.75	65.35	6.49	10.44	-	
Blackhawk Pure Wheat Bran	G.	15.00	3.20	62.00	-	-	12.00	
International Milling Co. Minneapolis, Minn.	F.	17.86	5.32	61.43	5.44	9.95	-	
Big Flake Pure Wheat Bran	G.	15.00	3.50	60.00	-	-	11.00	
Kansas Flour Mills Corp. Kansas City, Mo.	F.	16.77	4.11	60.99	6.21	11.92	-	
Fancy Brodflake Wheat Bran	G.	14.50	4.00	61.00	-	-	11.00	Wheat bran, wheat screenings.
H. H. King Flour Mills Co. Minneapolis, Minn.	F.	18.65	4.96	58.53	5.62	12.24	-	
Sunfed Winter Wheat Bran	G.	15.00	3.50	58.00	-	-	11.00	Wheat bran, mill run wheat screenings.
Larabee Flour Mills Co. Kansas City, Mo.	F.	16.72	4.10	62.20	6.47	10.51	-	
Chilean Wheat Bran	G.	13.00	4.00	50.00	-	-	13.00	Mill run screenings.
Franklin L. Lewi New York, N. Y.	F.	16.85	4.00	62.71	5.89	10.55	-	
Rex Wheat Bran	G.	15.00	3.50	50.00	-	-	12.00	Mill run screenings.
Maple Leaf Milling Co. Toronto, Canada	F.	17.25	5.47	59.98	5.89	11.41	-	
Niagara Choice Wheat Bran	G.	14.50	4.00	50.00	-	-	11.00	
Niagara Falls Milling Co. Lockport, N. Y.	F.	18.83	4.97	59.64	5.96	10.60	-	

Pure Wheat Bran	G.	14.00	4.00	62.00	-	-	12.00	
Northwestern Consolidated Milling Co. . . . . Minneapolis, Minn.	F.	17.95	4.81	59.03	5.54	12.67	-	
Ogilvie Wheat Bran	G.	15.00	3.50	50.00	-	-	11.50	
Ogilvie Flour Mills Co. . . . Montreal, Canada	F.	17.20	5.11	59.77	5.65	12.27	-	
Pillsbury's Hard Wheat Bran .	G.	14.00	4.00	63.00	-	-	12.00	Hard wheat bran, mill run wheat screenings.
Pillsbury Flour Mills Co. . . Minneapolis, Minn.	F.	16.11	4.63	61.54	6.11	11.61		
Premier Wheat Bran	G.	15.00	3.50	59.50	-	-	11.50	
St. Lawrence Flour Mills Co. . Montreal, Canada	F.	17.34	5.26	59.81	5.39	12.20	-	
Spring Wheat Bran and Wheat Screenings	G.	14.50	4.00	60.50	-	-	12.50	Wheat bran, mill run wheat screenings.
David Stott Flour Mills . . . Detroit, Mich.	F.	17.25	4.56	60.09	6.19	11.91	-	
Winter Wheat Bran	G.	13.50	3.50	64.20	-	-	12.00	Wheat bran, mill run wheat screenings.
David Stott Flour Mills . . . Detroit, Mich.	F.	14.14	4.46	63.73	6.16	11.51	-	
Stratton & Co.'s Fancy Wheat Bran	G.	14.00	4.00	64.00	-	-	11.00	
Stratton & Co. . . . . Concord, N. H.	F.	14.32	4.16	65.25	5.32	10.95	-	

Brand and Manufacturer	Pounds in 100 lbs. of Feeding Stuffs						Certified by Manufacturer to Contain
	Protein	Fat	Carbo-hydrates	Ash	Moisture	Crude Fiber	
Washburn's Gold Medal Wheat Bran	G. 14.00	4.00	63.00	-	-	12.00	Mill run screenings.
Washburn Crosby Co.	F. 16.02	4.29	63.14	5.84	10.71	-	
Minneapolis, Minn.							
WHEAT MIDDLINGS							
Dairy Maid Flour Middlings .	G. 13.50	3.50	58.00	-	-	6.00	Mill run screenings.
Federal Mill	F. 14.54	4.15	68.37	3.29	9.65	-	
Lockport, N. Y.							
Lucky Hard Wheat Standard Middlings	G. 16.00	4.50	56.00	-	-	9.50	Mill run screenings.
Federal Mill	F. 17.16	4.24	64.21	3.45	10.94	-	
Lockport, N. Y.							
Wheat Standard Middlings . .	G. 15.00	4.75	51.00	-	-	9.50	Wheat middlings, mill run screenings.
Hecker-Jones-Jewell Milling Co.	F. 17.47	5.02	63.07	4.38	10.06	-	
Buffalo, N. Y.							
Blackhawk Wheat Standard Middlings	G. 16.00	4.50	60.50	-	-	8.50	Mill run screenings.
International Milling Co. . .	F. 17.31	4.61	62.25	4.76	11.07	-	
Minneapolis, Minn.							
Argentina Wheat Standard Middlings	G. 14.00	4.00	52.00	-	-	9.50	Mill run screenings.
Franklin L. Lewi	F. 17.42	4.00	61.44	5.15	11.99	-	
New York, N. Y.							
Wheat Fancy Middlings . . .	G. 17.25	4.30	57.40	-	-	5.25	Mill run screenings.
Franklin L. Lewi	F. 19.61	4.90	60.25	3.89	11.35	-	
New York, N. Y.							

Maple Leaf Middlings	G.	16.50	3.50	55.00	-	-	4.50	
Maple Leaf Milling Co. . . . Toronto, Canada	F.	18.26	4.30	63.30	3.48	10.66	-	
Rex Wheat Middlings	G.	16.00	5.00	53.00	-	-	7.50	Mill run screenings.
Maple Leaf Milling Co. . . . Toronto, Canada	F.	17.73	5.59	61.81	4.31	10.56	-	
Niagara Standard Wheat Middlings	G.	14.50	4.50	50.00	-	-	7.00	Standard wheat middlings,
Niagara Falls Milling Co. . . Lockport, N. Y.	F.	18.04	4.59	61.39	4.79	11.19	-	mill run screenings.
Wheat Flour Middlings	G.	15.00	4.00	62.00	-	-	6.00	Wheat flour middlings, wheat screenings.
Northwestern Consolidated Milling Co. . . . . Minneapolis, Minn.	F.	19.04	4.74	61.15	4.27	10.80	-	
Wheat Standard Middlings . .	G.	15.00	4.00	62.50	-	-	9.50	Standard wheat middlings, mill run wheat screenings.
Northwestern Consolidated Milling Co. . . . . Minneapolis, Minn.	F.	17.82	5.13	61.46	5.01	10.58	-	
Pillsbury's Hard Wheat A Middlings	G.	16.00	4.00	62.00	-	-	6.00	Wheat red dog, wheat
Pillsbury Flour Mills Co. . . Minneapolis, Minn.	F.	16.73	4.37	64.58	3.46	10.86	-	standard B middlings, mill run wheat screenings.

Brand and Manufacturer		Pounds in 100 lbs. of Feeding Stuffs						Certified by Manufacturer to Contain
		Protein	Fat	Carbo-hydrates	Ash	Moisture	Crude Fiber	
Pillsbury's Hard Wheat Standard B Middlings	G.	15.00	4.00	62.50	-	-	9.50	Hard wheat standard middlings, mill run wheat screenings.
Pillsbury Flour Mills Co. . . Minneapolis, Minn.	F.	17.08	4.74	61.99	4.81	11.38	-	
Occident Flour Middlings . .	G.	15.50	4.00	60.00	-	-	5.00	
Russell-Miller Milling Co. . Minneapolis, Minn.	F.	20.00	4.29	61.06	2.77	11.88	-	
Occident Standard Middlings .	G.	15.00	4.00	59.50	-	-	9.50	
Russell-Miller Milling Co. . Minneapolis, Minn.	F.	19.70	5.39	59.06	4.79	11.06	-	
Wirthmore Flour Middlings . .	G.	15.00	4.00	50.00	-	-	6.00	Wheat middlings, wheat red dog, mill run screenings.
St. Albans Grain Co. . . . . St. Albans, Vt.	F.	18.52	5.39	60.85	4.18	11.06		
Pennant Wheat Middlings . . .	G.	15.00	4.00	63.70	-	-	9.00	Wheat middlings, mill run wheat screenings.
David Stott Flour Mills . . . Detroit, Mich.	F.	18.74	4.97	60.11	4.92	11.26	-	
Standard Wheat Middlings . .	G.	16.00	5.53	64.50	-	-	9.50	Mill run screenings.
Stratton & Co. . . . . Concord, N. H.	F.	15.15	4.71	64.55	4.21	11.38	-	
Stratton & Co.'s Fancy Fine White Middlings	G.	14.00	4.25	55.00	-	-	6.50	
Stratton & Co. . . . . Concord, N. H.	F.	14.49	3.82	68.07	2.70	10.92	-	
Wheat Middlings	G.	15.00	4.00	50.00	-	-	9.50	Wheat middlings, mill run screenings.
George Urban Milling Co. . . Buffalo, N. Y.	F.	17.04	4.18	63.28	4.35	11.15	-	

Washburn's Gold Medal Wheat Flour Middlings	G.	16.00	4.00	62.00	-	-	6.00	Mill run screenings.
Washburn Crosby Co.	F.	18.74	4.19	62.31	3.47	11.29	-	
Minneapolis, Minn.								
Washburn's Gold Medal Wheat Standard Middlings	G.	15.00	4.00	62.50	-	-	9.50	Mill run screenings.
Washburn Crosby Co.	F.	16.68	4.35	64.06	4.61	10.30	-	
Minneapolis, Minn.								
WHEAT MIXED FEED								
Capital Mixed Feed	G.	14.00	3.00	60.00	-	-	7.00	Wheat bran, second clear
E. W. Bailey & Co.	F.	18.52	4.91	60.95	4.39	11.23	-	wheat flour.
Montpelier, Vt.								
Barco Mixed Feed	G.	14.00	3.00	60.00	-	-	7.00	Wheat bran, second clear
G. N. Bartemus Co.	F.	17.16	4.37	62.94	3.85	11.68	-	flour.
Concord, N. H.								
D & F Mixed Feed	G.	15.00	3.50	55.00	-	-	8.00	Wheat bran, wheat red dog.
D & F Grain Co.	F.	18.25	4.93	62.09	4.16	10.57	-	
Pittsfield, N. H.								
Camel Fancy Wheat Feed . . .	G.	16.00	4.00	64.00	-	-	7.50	Wheat red dog, wheat
Excelsior Milling Co.	F.	14.81	3.74	66.42	4.92	10.11	-	middlings, wheat bran.
Minneapolis, Minn.								
Dairy Maid Mixed Feed	G.	13.00	3.50	57.00	-	-	10.00	Mill run screenings.
Federal Mill	F.	15.02	4.23	66.43	4.30	10.02	-	
Lockport, N. Y.								

Brand and Manufacturer	Pounds in 100 lbs. of Feeding Stuffs						Certified by Manufacturer to Contain
		Protein	Fat	Carbo-hydrates	Ash	Moisture	Crude Fiber	
Granite State Mixed Feed . .	G.	15.00	4.00	55.00	-	-	8.50	Wheat bran, wheat red dog, mill run screenings.
E. C. & W. L. Hopkins . . . Greenfield, N. H.	F.	18.17	5.21	60.21	4.83	11.58	-	
Merrimack Heavy Wheat Feed .	G.	15.00	4.00	55.00	-	-	9.00	Wheat bran, wheat white middlings, mill run screenings.
Merrimack Farmers' Exchange . Concord, N. H.	F.	16.90	4.71	62.94	4.71	10.74	-	
Planet Feed	G.	15.00	4.00	63.00	-	-	8.00	Wheat bran, red dog wheat flour.
Northwestern Consolidated Milling Co.	F.	19.18	4.46	60.23	3.95	12.18	-	
Pillsbury's Fancy Wheat Mixed Feed	G.	15.00	4.00	63.50	-	-	8.50	Wheat red dog, wheat bran, mill run wheat screenings.
Pillsbury Flour Mills Co. . . Minneapolis, Minn.	F.	17.56	4.65	62.26	4.56	10.97	-	
Brooks Fancy Wheat Mixed Feed	G.	15.00	4.00	63.00	-	-	8.00	Wheat bran, low grade flour.
Ralston Purina Co. . . . . St. Johnsbury, Vt.	F.	17.34	3.48	62.75	4.68	11.75	-	
E-A-Co. Hard Wheat Mixed Feed	G.	15.00	4.50	61.50	-	-	9.50	Wheat bran, wheat middlings, wheat red dog.
Russell-Miller Milling Co. . Minneapolis, Minn.	F.	19.26	5.00	59.53	4.83	11.38	-	
Occident Mixed Feed	G.	15.00	4.50	61.50	-	-	9.50	Wheat bran, wheat middlings, wheat red dog.
Russell-Miller Milling Co. . Minneapolis, Minn.	F.	16.77	4.56	63.20	5.14	10.33	-	
Wirthmore Wheat Feed	G.	15.00	3.75	50.00	-	-	8.00	Wheat bran, wheat red dog, mill run screenings.
St. Albans Grain Co. . . . . St. Albans, Vt.	F.	16.77	4.41	63.15	4.53	11.14	-	

Stratton & Co.'s Wheat Mixed Feed	G.	13.50	4.11	63.00	-	-	7.13	Mill run screenings.
Stratton & Co.	F.	14.22	4.14	65.36	4.86	11.42	-	
Concord, N. H.								
Washburn's Gold Medal Fancy Wheat Mixed Feed	G.	15.00	3.50	65.50	-	-	7.50	Wheat bran, wheat screenings, low grade wheat flour.
Washburn Crosby Co.	F.	17.82	4.36	62.79	3.81	11.22	-	
Minneapolis, Minn.								
WHEAT RED DOG								
Farmso Red Dog	G.	15.00	3.00	64.80	-	-	4.00	
Farmers' Service Bureau . . .	F.	17.34	3.21	65.99	2.82	10.64	-	
Baltimore, Md.								
Pillsbury's XX Daisy	G.	16.00	4.00	62.00	-	-	4.00	
Pillsbury Flour Mills Co. . .	F.	19.17	4.31	62.28	2.98	11.26	-	
Minneapolis, Minn.								
Superior Wheat Red Dog . . .	G.	16.50	3.50	64.00	-	-	4.00	
Robin Hood Mills	F.	19.00	4.79	62.62	2.69	10.90	-	
Moose Jaw, Canada								
Washburn's Gold Medal Adrian Red Dog	G.	16.00	3.50	64.00	-	-	4.00	
Washburn Crosby Co.	F.	19.30	4.59	61.90	2.90	11.31	-	
Minneapolis, Minn.								

Brand and Manufacturer		Pounds in 100 lbs. of Feeding Stuffs						Certified by Manufacturer to Contain
WHEAT SHORTS		Protein	Fat	Carbo-hydrates	Ash	Moisture	Crude Fiber	
Argentine Wheat Pollards . .	G.	14.00	4.00	52.00	-	-	9.50	Mill run screenings.
Bradley & Baker	F.	16.11	3.57	62.90	5.77	11.65	-	
New York, N. Y.								
Bronco Wheat Shorts	G.	16.00	5.00	54.00	-	-	8.00	
J. A. Forrest & Co.	F.	20.53	6.02	58.12	4.36	10.97	-	
Minneapolis, Minn.								
Hamco Wheat Shorts	G.	16.00	5.00	52.00	-	-	8.00	
Frank B. Ham Co.	F.	18.76	6.01	59.68	4.32	11.23	-	
Toronto, Canada								
Lakewoods Wheat Shorts . . .	G.	16.00	5.00	56.00	-	-	8.00	
Lake of the Woods Milling Co.	F.	18.82	5.28	60.43	4.45	11.02	-	
Montreal, Canada								
Ogilvie Wheat Shorts	G.	16.00	5.00	54.00	-	-	8.00	
Ogilvie Flour Mills Co. . . .	F.	19.65	5.99	59.29	4.48	10.59	-	
Montreal, Canada								
Parrheim Wheat Shorts . . .	G.	16.00	5.00	52.00	-	-	8.00	
Parrish & Heimbecker	F.	16.29	4.40	64.67	3.85	10.79	-	
Toronto, Canada								
Bell Cow Wheat Shorts	G.	15.00	4.00	65.00	-	-	8.00	Wheat shorts, mill run
Quaker Oats Co.	F.	18.87	5.35	60.21	3.99	11.58	-	screenings.
Peterborough, Ont.								
Pioneer Wheat Shorts	G.	16.00	5.00	55.00	-	-	8.00	
Western Canada Flour Mills Co.	F.	19.26	5.83	58.77	4.50	11.64	-	
Calgary, Canada								

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